

**DMDC Report No. 97-005**  
**April 1997**

## **Child Care Arrangements:**

**Results from the 1992 DoD Surveys  
of Officers and Enlisted Personnel and  
Military Spouses**

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REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave Blank)	2. REPORT DATE April 1997	3. REPORT TYPE AND DATES COVERED Final Report -- January 1996 to April 1997		
4. TITLE AND SUBTITLE Child Care Arrangements: Results from the 1992 DoD Surveys of Officers and Enlisted Personnel and Military Spouses		5. FUNDING NUMBERS <i>DASW01-94-H-0003</i>		
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9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Defense Manpower Data Center 1600 Wilson Boulevard, Suite 400 Arlington, Virginia 22209		10. SPONSORING/MONITORING AGENCY REPORT NUMBER  97-005		
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT  Approved for public release; distribution in unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words)  To better understand and plan for the needs of a changing military force, the Defense Manpower Data Center (DMDC) conducted the 1992 Surveys of Officers and Enlisted Personnel and Their Spouses. The surveys were designed to provide information on issues that affect military personnel, particularly military families, and guide the development of future personnel policies. The primary focus of the study was to analyze issues related to military child care. The focus of the analysis included: a) factors that related to the cost of child care; b) demographics and characteristics of military life that are associated with use and satisfaction with DoD-provided child care services; c) characteristics of Service members who experience difficulties in responding quickly to recalls or alerts because of child care problems; and d) factors that are related to the decision to select on- or off-base child care services. Results described gender differences among military personnel in the type of child care resources they utilized (i.e., other family members, day care, child care centers, schools). Other noteworthy findings addressed the importance of qualitative factors which influence child care selection decisions and problems encountered by single parents when confronted with recalls/alerts.				
14. SUBJECT TERMS military life, military families, child care, personnel policy, single parents, child care costs, family policy			15. NUMBER OF PAGES 97	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THE PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	

# **CHILD CARE ARRANGEMENTS:**

## **RESULTS FROM THE 1992 DOD SURVEYS OF OFFICERS AND ENLISTED PERSONNEL AND MILITARY SPOUSES**

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# Executive Summary

## Introduction

To maintain efficiency and effectiveness, the Department of Defense (DoD) must be a responsive employer. As the military becomes more gender-integrated and more family-oriented, DoD must understand and plan for the needs of the changing Service force. To provide input for policies that relate to military families, the Defense Manpower Data Center (DMDC) conducted the *1992 Department of Defense Surveys of Officers and Enlisted Personnel*. The surveys were designed to provide an analysis of issues such as the impact of changing family structures, to guide updates of current policies to accommodate changing needs, and to assist in the development of new policies.

The 1992 surveys included active-duty personnel in all four military Services. They were based on stratified samples of 40,812 officers and 56,015 enlisted personnel, for a total of 96,827 Service members. Responses were received from 59,930 Service members (27,684 officers and 32,246 enlisted personnel). Response rates, based on the number of completed survey returns and the number of eligible members, were 71.6 percent for officers, 62.3 percent for enlisted personnel, and 66.3 percent overall. The stratified samples were drawn from four different sources:

- A longitudinal database consisting of a subsample from the 1985 survey sample,
- A sample of recruiters,
- A sample of active-duty members, and
- A sample of Active Guard/Reserve or Training and Administration of the Reserve (AGR/TAR) members.

The survey questionnaire gathered information on demographics, military background and lifestyles, deployments, retention and career intentions, dependents and child care issues, military compensation, benefits and programs, and family resources.

This report is the fourth in a series of five analytical reports that are based on the 1992 survey results. The objective of this report is to analyze issues related to military child care. Child care is a concern for military policymakers because it can have an impact on the development of children of Service members, cause stress in family relationships, and ultimately affect the combat readiness of Service members themselves. Child care arrangements can present special problems during alerts or deployments. With more single parents and dual-military couples in today's military, and with more dependents in military families, the strain on the military's child care system is growing.

The child care provisions of the military are becoming increasingly taxed. For example, construction and renovation of Child Development Centers (CDCs) have failed to keep pace with demand for the facilities, and it is often difficult for families to enroll their children in CDCs, particularly after a relocation. In addition, CDCs have limited service hours. The military has tried to accommodate spillover through other facilities, such as Family Day Care homes and civilian child care. Still, there

is concern over the availability of military-provided child care, particularly for frequently transferred personnel, shift workers, and those with sick children. DoD policymakers are interested in keeping up with the demand and providing flexible schedules, high quality, reliable services, and reasonable prices for the child care facilities provided to Service members.

Some earlier studies (e.g., Zellman, Johansen, & Meredith, 1992) have examined the condition of the military child care system, but they have not explored the impact of child care problems on individual and family readiness. The central issues addressed in the present study include the factors that are related to the cost of child care; the demographics and features of military life that are associated with satisfaction with DoD-provided child care services; the characteristics of Service members who find it more difficult to respond quickly to recalls or alerts because of problems related to child care; and the factors that are related to the decision to choose child care services on or off base. This report describes findings, based on responses from the 1992 surveys, that are related to the condition of the military child care system.

## **Analysis Methodology**

A systematic approach was used for the analysis of the 1992 survey results: developing questions, determining descriptive statistics to test interrelationships among the survey variables, and constructing a series of multivariate models based on relationships identified by the descriptive tests. The questions to be addressed in this report were as follows:

- What characteristics of Service members and their families are related to higher and lower levels of child care expenses?
- Are some Service members more satisfied than others with DoD-provided child care facilities?
- Are some Service members more likely than others to experience difficulty in responding quickly to recalls, alerts, or changes in work schedule because of problems with child care arrangements?
- Are some Service members more likely than others to use on-base child care facilities?

Explanatory variables (developed from the survey responses) included the following: 1) individual, military, and family demographics; 2) housing and child care arrangements; and 3) job-related variables for Service members and their spouses. Simple descriptive tests (e.g., frequency tables and Chi-square tests) were used to explore the interrelationships among the explanatory variables and the relationships between explanatory variables and dependent measures. A series of more complex multivariate models (i.e., regressions) were used to examine directional interrelationships between the explanatory and dependent variables. The objective was to provide information for DoD deployment programs and policies and, thereby, make individual Service members, as well as their units, more combat-ready.

## **Findings**

The following are highlights of the findings:

- More than 40 percent of male enlisted personnel and about 40 percent of male officers relied either on themselves or their spouses to provide child care at home. About 22 percent of male enlisted personnel and about 25 percent of male officers used child care services provided by schools.

More than 20 percent of male enlisted personnel and 15 percent of male officers used day care facilities. In contrast, more than 60 percent of female Service members—both enlisted personnel and officers—placed their children in school or day care programs.

- Qualitative aspects of child care, such as trust in the caregiver and quality, were cited much more frequently than cost as a basis for choosing a child care arrangement.
- Single Service members with dependent children and those in dual-military families spent more per month on child care and tended to use on-base child care facilities more often than did those in other family types.
- Among enlisted personnel and officers, those who were in the Air Force, those who had more severe problems finding child care during PCS moves, and those who used off-base child care facilities tended to be less satisfied with DoD-provided child care facilities.
- As compared to Service members with civilian spouses, single parents (both officers and enlisted personnel) and officers in dual-military couples experienced more difficulties responding to recall/alert.
- Dual-military couples (both officers and enlisted personnel) were more likely to be users of on-base child care facilities than were Service members married to civilian spouses, and single officers were more likely to use on-base child care than were officers married to civilians. Navy Service members were less likely to use on-base child care than were members of the other Services.

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# Introduction

## Background

To maintain efficiency and effectiveness, the Department of Defense (DoD) must be a responsive employer. Toward this end, DoD periodically assesses the characteristics, behaviors, attitudes, values, expectations, career intentions, and satisfaction of military Service members and their families and identifies potential areas for improvements in personnel policy. As the military work force becomes more gender-integrated and more family-oriented, DoD must understand and plan for the needs of the changing force. Yesteryear's troops were predominantly single men; in contrast, today's volunteers consist of married men and women, mothers and fathers, dual-military couples, and single parents, as well as single men and women.

Because the military is no longer primarily single individuals, personnel policies, services, and programs must be offered to enable the changing military personnel to manage both family life and military life. Such policies and programs can contribute to recruitment, morale, readiness, performance, and personnel retention.

A variety of research studies have provided input for structuring DoD policies and programs. Many of those studies, however, have focused on the combat readiness of military units rather than individual readiness. Also, issues such as the influence of outside factors (e.g., child care arrangements) on the ability of Service members to respond quickly to recalls or alerts have not been adequately addressed.

To provide further input on family policies, the Defense Manpower Data Center (DMDC) conducted the 1992 *Department of Defense Surveys of Officers and Enlisted Personnel*, which focused extensively on military families. Development of the surveys was coordinated through the Office of the Under Secretary of Defense for Personnel and Readiness (Personnel Support, Families & Education, Office of Family Policy, Support & Services). The surveys were administered to active-duty personnel in all four military Services. They included items on demographics, military background and lifestyle, deployments, retention and career intentions, dependents, military compensation, benefits and programs, civilian labor force experience, and family resources.

To aid in the dissemination and utilization of findings from the 1992 surveys, DMDC has published five topical reports. This report presents findings that can be used in formulating policy changes to reduce problems with individual and family readiness for deployment that are related to arrangements for child care. The four other reports address the following topics: background and characteristics of military families (Report 1); individual and family readiness for separation and deployment (Report 2); Operations Desert Shield and Desert Storm (Report 3); and the military as a career (Report 5). The remaining sections of this introduction include a literature review, which describes earlier studies related to military child care, and a survey methodology section, which describes the development of the 1992 surveys.

## Literature Review

Child care is a serious concern of military families in today's all-volunteer force. "The Department of Defense offers child care in order to assist DoD military and civilian personnel in balancing the competing demands of family life and the accomplishment of the mission, and to improve the economic

viability of the family unit" (Department of Defense, 1993, p. 5-7). The competing demands of the family and military life can dramatically affect the emotional and social development of Service members' children, in addition to straining marital and family relationships. Today's military families include more dependents, single parents, and dual-military couples than ever before. Consequently, child care arrangements can present special problems for Service members during separations and deployments, such as Operations Desert Shield/Desert Storm (ODS/S).

Child care issues for military families mirror those of civilian parents: child caretaker, the location and type of child care facility, schedule flexibility, quality, reliability, and cost. The nature of military service, however, magnifies the importance of some of these issues, particularly schedule flexibility and availability of child care in new locations. For parents, unreliable child care or gaps in child care (e.g., lack of assistance when a child is sick or when a family has relocated) interfere with assignments and training which are designed to prepare the military member for service.

## **Family Care Plans**

The demands of military life sometimes require Service members to be absent for extended hours and, perhaps, for months at a time when deployed. Such separations require contingency child care plans. In 1992, DoD began to require thorough documentation and verification of Family Care Plans by identifying the primary care provider when there was no spouse present to take over child care (Presidential Commission on the Assignment of Women to the Armed Forces, 1992). The Plans also specify the length of time that the child care provider agrees to assume responsibility for the child.

## **Child Care Options**

Child care arrangements for military families are similar to those available to civilians. However, the demand for child care among military personnel is so great that DoD has appropriated funds for construction and renovation of child care facilities on military installations and for oversight of day care homes. Nonetheless, military child care programs have failed to keep pace with growing demand; therefore, civilian day care services that complement DoD-sponsored programs have been frequently used by military parents.

Several types of DoD-supported child care programs are available on military installations (Zellman, Johansen, & Meredith, 1992). Child Development Services, which are sponsored by the DoD, consist of Child Development Centers (CDCs) and Family Day Care (FDC). Off-base care, in day care centers and in homes with licensed child care providers, is another option for military parents.

**Child Development Centers.** A CDC is a centralized day care service that adheres to DoD safety and training guidelines. As part of the DoD child care system, CDCs are also required to develop a standardized educational curriculum for the children. All CDC staff are required to participate in child care training each year. The CDCs are located on military installations and are usually convenient for parents. Also, CDCs are generally more spacious than FDC homes and less costly than either FDC homes or civilian child care. Charges for CDC care are based on total family income, to ensure that junior personnel have access to affordable child care. Priority is given to single parents and dual-military couples.

Despite these arrangements and training requirements, however, the CDCs are inadequate in some important areas. For example, since they are relatively less expensive, there are generally long waiting

lists for enrolling children. Strict hours of operation hinder flexibility; CDCs are usually open only 12 hours a day—hours that often cannot accommodate the needs of Service members in positions requiring additional duty or shift work. In addition, the CDCs have policies that prohibit the care of sick children under certain circumstances, placing further limits on the availability of care.

**Family Day Care.** FDC is child care provided by the spouse of a Service member in a home (on or off base). Base commanders have the authority to subsidize the operation of FDC providers, but funds are often limited. Although FDC homes are supposed to meet the same health and safety standards as CDCs, the occupational health training of FDC providers varies. The cost of this type of child care is regulated, and charges are usually comparable with those of CDCs.

An advantage of FDC is that the providers are free to set their own schedules, which makes them better able to meet the needs of military families whose needs are incompatible with CDC hours. Extended and weekend hours can be arranged on an individual basis. A disadvantage is that the frequent moves of Service members may disrupt the operation of FDC facilities. For example, when FDC providers leave, Service members who were receiving care from that facility must find new arrangements, either with another FDC or with an alternative care provider. In addition, children enrolled in the FDC often leave abruptly when their parents are transferred. When the FDC enrollment falls below a minimum number of children, the facilities may be shut down, thus making them less stable than CDCs or civilian child care facilities.

## Summary

The foremost concern about military child care is availability. CDCs rarely have openings available immediately (i.e., there are waiting lists), and their hours are inflexible. Transfers to new locations require changes in child care arrangements that affect the entire family. The children must adapt to a new situation, and in many cases the spouse must look for employment as well as find a new child care facility.

## Survey Sample

The 1992 surveys were based on a probability sample of military personnel on active duty as of December 1991. The sample included 40,812 officers and 56,015 enlisted personnel (a total of 96,827 members) and was stratified by Service, status (officer or enlisted), and gender. Responses were received from 27,684 officers and 32,246 enlisted personnel (59,930 total), which represented a 66 percent overall response rate (respondents as a percentage of eligible members). Surveys similar to the 1992 surveys were also conducted in 1978 and 1985.

The survey sample included four separate samples: (1) longitudinal, (2) recruiters, (3) members, and (4) Active Guard/Reserve or Training and Administration of the Reserve (AGR/TAR) members.

The stratification scheme, sample sizes, and sample selection approach for each of the four samples were similar. All four samples were selected using probability methods; that is, each eligible individual had a non-zero, known probability of selection. Probability sampling allowed for the projection of the survey results to the target population (Service members), using weights developed to reflect variable probabilities of selection and nonresponse bias. The database used in the analyses for this report included all four samples combined, and all analyses were conducted with the weighted data (see Appendix A for more detail on sampling, databases, and weighting).

The sampling frames, sample sizes, and stratification corresponding to each of the four samples selected for the 1992 surveys were as follows:

- The longitudinal sample consisted of a subsample of 11,999 from the personnel selected for the *1985 Department of Defense Survey of Officer and Enlisted Personnel* who were still in the military as of December 1991. The sample maintained the stratification of the 1985 survey (i.e., Service, officer/enlisted status, and gender).
- The recruiter sample consisted of 3,999 recruiters, approximately 1,000 per Service.
- The member sample consisted of members on active duty as of December 1991 who had been in the Service for 4 months or more and were neither recruiters nor included in the 1985 survey. The sample of 75,345 active military personnel was derived by selecting approximately 5,000 members from each of the 16 cells defined by Service, officer/enlisted status, and gender.
- The AGR/TAR sample included approximately 500 AGR/TAR from each of the 14 cells defined by seven levels of Reserve Component and officer/enlisted status. Some cells had fewer than 500 members. A total of 5,484 full-time, support AGR/TAR members were selected.

# Analysis Methodology

## Background

Readily available, high-quality child care can reduce stress on military families, increase individual (and unit) readiness, and improve Service members' satisfaction with military life in general. Therefore, the DoD's success in providing child care services is important for retaining good, experienced soldiers with families. This report analyzes the results of the 1992 surveys to provide a characterization of child care in the military today, and to describe the factors that influence various aspects of child care arrangements, such as choices, costs, and problems. The results may be useful for identifying patterns of child care usage, pinpointing disadvantaged groups, identifying problem areas, and, eventually, improving DoD-provided child care services.

Descriptive tabulations and multivariate statistical analyses were performed to address the following questions:

- Who takes care of the children of military families?
- What types of facilities and locations are preferred by Service members?
- What factors influence Service members' satisfaction with dependent care?
- Are some Service members more likely than others to choose DoD-provided (on base) child care?
- What factors influence the cost of child care?
- To what degree are problems encountered by Service members in making satisfactory child care arrangements?
- Are some Service members more likely than others to experience difficulty in responding quickly to recalls, alerts, or changes in work schedule because of child care problems?

To examine these questions, variables were selected for use as independent (explanatory) measures for the analyses. Table 1 lists the survey variables that were used in the analyses and the questionnaire items corresponding to the variables, as well as additional variables that were recoded, derived, or combined for use in the analytical models.

**Table 1. Items Included in the Analyses**

Short Name	Questionnaire/Record Data Item	Scale	Definition of Explanatory Variable
<b>1) Individual Demographics:</b>			
Gender	Are you male or female?	—	Dichotomous numerical variable
Race/Ethnicity	Are you: American Indian/Alaskan Native Black/Negro/African-American Oriental/Asian/Chinese/Japanese/ Korean/Filipino/Pacific Islander White/Caucasian Other (specify)?	—	Dichotomous variables for Black, White, Hispanic, and other (all other race/ ethnicity categories). For example, when a respondent was Black, the variable BLACK was set to 1; otherwise, BLACK was set to 0.

**Table 1. Items Included in the Analyses (Continued)**

Short Name	Questionnaire/Record Data Item	Scale	Definition of Explanatory Variable
<b>2) Military Demographics:</b>			
Pay Grade	What is your pay grade? Enlisted personnel: E1 to E9 Officers: O1 to O7 and W1 to W5	—	Dichotomous variable for E1 to E4, E5 to E6, and E7 to E9 (for enlisted personnel), O1 to O3, W1 to W3 and O4 to O7, W4 to W5 (for officers)
Military Branch	In what Service are you? Army Navy Marine Corps Air Force	—	Dichotomous variables for each Service
Military Occupation	Occupation Enlisted personnel: Infantry Electronic Equipment Repair Comm/Intelligence Specialists Health Care Specialists Other Tech/Allied Specialists Function Support/Administration Elec/Mech Equipment Repair Craftsmen Service/Supply Handlers Non-occupational Officers: General Officers and Executives Tactical Operations Officers Intelligence Officers Engineering and Maintenance Scientists and Professionals Health Care Officers Administrators Supply, Procurement, Allied Officers Non-occupational	—	Dichotomous variable for each occupation
CONUS/OCONUS	Variable taken from the ADMM&L/RCCDDS file: CONUS OCONUS	—	Dichotomous variable, set to 1 if CONUS, 0 if OCONUS
Hours Worked	On the average, what is the total number of hours per week you work at your military job? 40 hours or less 41-50 hours 51-60 hours 61-80 hours More than 80 hours	40 to 85 hours:  40 hours 45.5 hours 55.5 hours 70.5 hours 85 hours	Continuous numerical variable
Annual Leave	During the past year have the demands of your military job prevented you from taking annual leave?	—	Dichotomous variable, set to 0 if yes, 1 if no

**Table 1. Items Included in the Analyses (Continued)**

Short Name	Questionnaire/Record Data Item	Scale	Definition of Explanatory Variable
<b>2) Military Demographics (Continued):</b>			
Hours of Duty	What percent of your work hours are spent on duty-related tasks? Less than 20 percent 21-40 percent 41-60 percent 61-80 percent 81-100 percent	5-point scale, reverse coded (1 = 81-100 percent ... 5 = less than 20 percent)	Continuous numerical variable
Housing	At your permanent post, base, ship or duty station, what type of housing do you live in? a. Base/government housing b. Leased by the military for Service families c. Owned or being bought by you or someone in your household d. Rented for cash e. Owned by someone else and let without payment of cash rent f. Live on-board a Navy ship g. Navy lodge	—	Dichotomous variable, set to 1 if on base (a, f, or g), 0 if off base (b, c, d, or e)
<b>3) Family Demographics:</b>			
Family Type	What is your <i>current</i> marital status?  Is your spouse currently serving on active duty in the Armed Forces or in the Reserve/Guard?  How many dependents do you have in each age group?  How many dependents do you have in each age group who <i>currently live with you</i> at your permanent post, base or duty station?	Single, no custodial dependents Single with custodial dependents Military spouse, no custodial dependents Military spouse with custodial dependents Civilian spouse, no custodial dependents Civilian spouse with custodial dependents	Dichotomous variable for each family type, constructed from responses to the four questions
Spouse's Occupation	Is your spouse currently: a. Full time in the Armed Forces b. In Reserve or National Guard c. Working full-time in Federal civilian job d. Working full-time in other civilian job e. Working part-time in Federal civilian job f. Working part-time in other civilian job g. Self-employed in his or her own business h. With a job, but not at work because of <i>temporary</i> illness, vacation, strike, etc. i. Unpaid worker (volunteer or in family business) j. Unemployed, laid off or looking for work k. Not looking for work but would like to work l. In school m. Retired n. A homemaker o. Other	—	Defined six dichotomous variables: Full-time civilian (c, d) Part-time civilian (e, f) Full-time military (a) Reserve/ National Guard (b) Homemaker (n) Other (g-m, o)



**Table 1. Items Included in the Analyses (Continued)**

Short Name	Questionnaire/Record Data Item	Scale	Definition of Explanatory Variable
<b>3) Family Demographics (Continued):</b>			
Age of Youngest Dependent	How many dependents do you have in each age group? a. Under 1 year b. 1 year to under 2 years c. 2-5 years d. 6-13 years e. 14-22 years f. 23-64 years g. 65 years or over	7-point scale:  1 2 3 4 5 6 7	Discrete numerical variable
<b>4) Other Variables:</b>			
Child Care Location	Where was your youngest or only child <i>usually</i> cared for? a. Nursery or preschool b. Elementary or secondary school c. Child Development Center/Day Care Center d. Child's home e. Licensed family day care home f. Other private home (not licensed) g. Other place	On base Off base	Dichotomous variable, set to 1 if any on base care, 0 otherwise
Workable Child Care Arrangement	Are arrangements for your dependent children realistically workable for each of the following situations? a. Short-term emergency situation such as a mobility exercise b. Long-term situation such as a unit deployment c. Evacuation due to conflict or wartime situation	Yes Probably No	Dichotomous variable created for each situation, set to 1 if yes or probably, 0 otherwise
Child Care Hours	How many hours a week was your youngest or only child usually cared for?	0 to 99 hours	Continuous numerical variable, equal to the number of child care hours
Cost of Child Care	How much did you pay for child care during the last month for your youngest or only child?	0 to 999 dollars	Continuous numerical variable, equal to the cost of child care in dollars
Problems Finding Child Care	Think about your PCS move to your current <i>permanent</i> post, base, ship or duty station. For each item below, mark if it was (1) serious problem, (2) somewhat of a problem, (3) slight problem, (4) not a problem, (5) does not apply, (6) don't know: o. Finding child care	4-point scale, reverse coded (1 = serious problem ... 4 = not a problem)	Discrete numerical variable
Satisfaction with DoD Child Care	For each family program or service listed below, please mark your level of satisfaction if you have used it: h. Child care services	5-point scale, reverse coded (1 = very dissatisfied, ... 5 = very satisfied)	Discrete numerical variable

**Table 1. Items Included in the Analyses (Continued)**

Short Name	Questionnaire/Record Data Item	Scale	Definition of Explanatory Variable
<b>3) Other Variables (Continued):</b>			
Satisfaction with Child Care During Absence	How satisfied are you with the care your child(ren) received in your absence (during your longest TDY/deployment in the past 12 months)?	5-point scale, reverse coded (1 = very dissatisfied ... 5 = very satisfied)	Discrete numerical variable
Difficulties in Responding to Recall/Alert	Listed below are some reasons why military members sometimes find it difficult to <i>respond very quickly</i> to a recall/alert or to a change in work schedule. Have you experienced any of these within the past 12 months? a. Does not apply, I have not had recall/alert or change in work schedule b. Does not apply, have not had problems c. Dependent care considerations d. Personal health problems other than pregnancy e. Pregnancy f. Family health problem g. Second job h. Transportation arrangements i. Difficult to reach by telephone during off-duty hours j. Other reason	—	Dichotomous variable created, set to 1 if c was marked, missing if a or b, 0 otherwise

## Descriptive Statistics

The analysis began with tabulations that were used to characterize child care usage for different demographic groups. Three key characteristics related to child care were of particular interest: choice of primary care provider, location of child care, and reason for choosing a particular child care arrangement. Cross-tabulations between these characteristics and demographic characteristics were used to obtain a snapshot of child care usage for different groups. For example, choice of primary care provider (e.g., spouse, day care center) was crossed with gender to determine usage patterns by sex of the Service member. The resulting tabulations were used to answer research questions about who takes care of children and what types of facilities and locations are preferred by different demographic groups.

After the tabulations had been run, simple descriptive tests were performed to determine relationships among explanatory variables (e.g., female and Black) and between explanatory variables and the dependent measures (e.g., White and child care location). The most frequently employed test was the Chi-square test of independence, which determines whether an association exists between two categorical variables.

Questions about child care were answered by Service members with dependents, whether or not he/she was the custodial parent. All individual and family characteristics examined—Service, pay grade, race/ethnicity, gender, family type, age of youngest dependent, and on-base or off-base location of residence—were statistically significant with respect to the dependent variables examined (primary caregiver, location of care, and reason for choice of child care arrangement), suggesting that the

responses to the survey questions related to child care were not independent of the particular background characteristic under consideration. The exception was location of assignment (CONUS/OCONUS), which was not statistically significant. Because of the large number of Service members in the sample, the Chi-square may be statistically significant even when differences are small. However, the differences in answers to the child care questions associated with four background characteristics—gender, pay grade, family type, and age of youngest dependent—were *highly* significant statistically ( $p < .01$ ).

Although the simple tests were useful to get a feel for relationships among the variables, a more complex test was needed to determine which demographic groups were likely to experience difficulties and which were likely to choose on-base child care. Unlike the simple picture obtained when each demographic factor is analyzed separately (i.e., with a Chi-square test), multivariate analyses show the unique effects of each variable while holding other variables constant.

## Multiple Regression Models

In general, multiple regression is used to examine the relationship of a set of independent (explanatory) variables to a dependent variable (the variable to be explained), holding all other variables constant. The multiple regression procedure is applied in analyzing survey data when the dependent variable is continuous (e.g., child care cost) or consists of ordinal levels (e.g., satisfaction with child care). Multiple regression is used to examine the relationship of a set of independent variables to a dependent variable, but the model also predicts a level of the dependent variable (as opposed to a 1/0 outcome), and the influence of the independent variables is expressed in terms of a Beta coefficient. The value of the  $t$  statistic is used to determine which variables should be kept in the model (i.e., the significance of the coefficients associated with the explanatory variables). The influence of each independent variable is expressed in terms of a Beta coefficient. An  $R^2$  statistic is used to measure the goodness of fit of the model (see discussion in Appendix B).

The dependent measure used to examine the factors affecting child care costs was based on the following question from the 1992 surveys (see Appendix C for a copy of the questionnaire):

*How much did you pay for child care during the last month for your youngest or only child?*

This dependent measure was used to answer the research question, “What factors influence child care costs?”

There were several survey items that could have been used to examine the factors influencing Service members’ satisfaction with DoD-provided child care. The one that most closely matched the relevant research question was as follows:

*For each family program or service listed below, please mark (a) whether you have ever used it at your present permanent duty location and (b) your level of satisfaction if you have used it:*  
- Child care services.

The responses were reverse-coded; in other words, a value of 1 corresponded to *Very Dissatisfied*, 2 corresponded to *Dissatisfied*, 3 corresponded to *Neither Satisfied nor Dissatisfied*, 4 to *Satisfied*, and 5 to *Very Satisfied*. This dependent measure was used to answer the research question, “What factors influence Service members’ satisfaction with dependent care?”

## Logistic Regression Models

Logistic regression is used when a dependent variable is dichotomous (i.e., when the variable has only two possible values, 1 and 0). Several of the variables that measured child care characteristics of interest were dichotomous or could be made dichotomous. For example, the dependent measure used to examine the factors affecting whether a Service member encountered difficulties in quick response to a recall or an alert was based on the following question from the 1992 surveys (see Appendix C for a copy of the questionnaire):

*Listed below are some reasons why military members sometimes find it difficult to respond very quickly to a recall/alert or a change in work schedule. Have you experienced any of these within the past 12 months?*

*- Dependent care considerations.*

A dichotomous measure of individual and family readiness, called "DIFFICULTY," was defined, with a value of 1 if the Service member experienced difficulties because of dependent care considerations and a value of 0 if he or she did not. This dependent measure was used to answer the research question, "Are some Service members more likely than others to experience difficulty in responding quickly to recalls, alerts, or changes in work schedule because of child care problems?", by examining the likelihood that DIFFICULTY = 1 for different groups of Service members.

The dependent measure used to examine the factors affecting whether a Service member found on or off base child care was based on the following question:

*Where [on or off base] was your youngest or only child usually cared for [during the last month, while you and/or your spouse worked, looked for work, or was in school]?*

A dichotomous measure for location of child care, called "ONBASE," was defined, with a value of 1 if child care was usually on base and 0 if it was usually off base. This dependent measure was used to answer the research question, "Are some Service members more likely than others to choose DoD-provided (on base) child care?", by examining the likelihood that ONBASE = 1 for different groups of Service members.

Since these research questions necessitated a measure of the impact of demographic variables upon the likelihood of an outcome, logistic regression was selected as the appropriate multivariate technique.<sup>1</sup> With logistic regression it was possible (a) to assess statistically the relative importance of each explanatory variable on the outcome measure (in this case, DIFFICULTY or ONBASE), and (b) to determine the applicability of the overall model.

The results of the logistic regression can be expressed in terms of the *relative odds* of experiencing difficulties in responding to recall/alert. Relative odds, expressed as percentages and computed from logistic regression Beta coefficients, indicate the increase or decrease in the likelihood of an event, as compared to a reference group. For example, relative odds of -61 percent for males compared to females (the reference group) with respect to having difficulties in responding to recall/alert indicate that males are 61 percent less likely to have difficulties related to child care arrangements than are females. For

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<sup>1</sup>See Appendix B for a more detailed discussion of logistic regression and relative odds.

a continuous variable, such as the cost of child care, the relative odds refer to the impact of an increase of one unit (in this case, a dollar spent per month).

Because of the complex survey design, a software package called SUDAAN was used for the logistic regression model. Unlike SAS, which is often used for regression models when a survey design is more straightforward, SUDAAN does not provide a traditional goodness-of-fit statistic, such as Chi-square. The SUDAAN procedure produces a statistic that measures the weighted simple correlation between the observed and predicted values of the dependent variable,<sup>2</sup> which acts as a proxy for the multiple  $R^2$ . Fortunately, this statistic can be interpreted in much the same way as a traditional goodness-of-fit measure. Another statistic was used to assess the statistical significance of the *increase* in the model's fit after the inclusion of each new set of independent variables.

In the tables of results that follow, numbers and percentages are based on weighted data. As such, the numbers in the tables represent the numbers in the entire population of Service members. A significance level of .05 ( $p < .05$ ) was used to determine which Beta coefficients should be included in the final models and tables.

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<sup>2</sup>See Appendix B or the SUDAAN Manual (Research Triangle Institute, 1989) for more detail on the use of this procedure.

# Results

## Descriptive Statistics

### Enlisted Personnel

#### Gender

Table 2 compares the responses of enlisted Service members with dependents by gender for three key characteristics of child care for the youngest or only child: choice of primary caregiver, location of child care, and reason for choosing a particular child care arrangement. A very small proportion of female enlisted personnel (8.9 percent) relied on themselves or their spouses for the care of their youngest or only child, compared with almost half (43.8 percent) of male enlisted personnel. Women

**Table 2. Child Care Characteristics for Enlisted Personnel by Gender**

Child Care Characteristic	Weighted Total	Gender	
		Male	Female
Number			
Total Enlisted Personnel	591,286	519,670	71,616
Percent of Column Total			
Child's Primary Caregiver			
Sibling/Child	7.0	7.2	5.7
Non-Related	15.2	13.6	27.1
School/Day Care	29.1	26.5	48.3
Grandparent/Relative	9.1	8.9	10.0
Spouse/Service Member	39.6	43.8	8.9
Number			
Total Enlisted Personnel	533,893	466,273	67,620
Percent of Column Total			
Location of Care			
School	21.9	21.9	22.1
Day Care Center	23.2	20.4	42.3
Child's Home	41.5	45.1	16.8
Other Home	13.4	12.6	18.8
Number			
Total Enlisted Personnel	458,951	401,137	57,814
Percent of Column Total			
Reason for Choice of Arrangement			
Convenience	12.5	11.7	17.6
Quality	10.4	10.0	13.4
Cost	13.5	13.6	13.0
Availability	13.1	12.7	15.9
Trust in Caregiver	23.0	21.9	30.7
Prefer Family	27.5	30.1	9.6

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row for each grouping. Totals may differ slightly across tables because of missing data and rounding.

relied most often (48.3 percent) on day care or school for child care, followed by a caregiver who was not a family member or relative (27.1 percent). For male enlisted personnel, the most frequent child care location for their youngest or only child was the child's home (45.1 percent); however, for females it was a day care center (42.3 percent). Females reported "trust in caregiver" as the most important reason for their choice of child care arrangement; however, males indicated that the most important reason for their choice of child care arrangement was that they preferred to have a family member taking care of their youngest or only child.

### Pay Grade

As noted in Table 3, selection of a primary caregiver varied depending on the enlisted personnel's pay grade. For example, those in the lowest pay grade (E1 to E4) were far less likely to rely on a sibling or the child as the primary caregiver than were those in higher pay grades (E5 to E6, 6.3 percent;

**Table 3. Child Care Characteristics for Enlisted Personnel by Pay Grade**

Child Care Characteristic	Weighted Total	Pay Grade		
		E1 to E4	E5 to E6	E7 to E9
Number				
Total Enlisted Personnel	591,286	179,071	308,502	103,713
Percent of Column Total				
Child's Primary Caregiver				
Sibling/Child	7.0	1.3	6.3	18.8
Non-Related	15.2	17.5	15.8	9.5
School/Day Care	29.1	23.3	32.2	30.0
Grandparent/Relative	9.1	13.5	7.2	7.1
Spouse/Service Member	39.6	44.5	38.5	34.5
Number				
Total Enlisted Personnel	533,893	157,276	280,911	95,705
Percent of Column Total				
Location of Care				
School	21.9	14.3	22.9	31.4
Day Care Center	23.2	24.5	25.4	14.8
Child's Home	41.5	43.8	39.2	44.3
Other Home	13.4	17.4	12.5	9.5
Number				
Total Enlisted Personnel	458,951	141,653	240,129	77,169
Percent of Column Total				
Reason for Choice of Arrangement				
Convenience	12.5	11.7	13.3	11.3
Quality	10.4	9.3	10.5	12.1
Cost	13.5	15.8	13.2	10.3
Availability	13.1	11.3	14.2	13.1
Trust in Caregiver	23.0	25.1	22.9	19.5
Prefer Family	27.5	26.8	25.9	33.7

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row of each grouping. Totals may differ slightly across tables because of missing data and rounding.

and E7 to E9, 18.8 percent; compared with E1 to E4, 1.3 percent). Nonetheless, across all pay grade categories, the most frequently used child care providers were the Service member or his/her spouse and school/day care. The child's home was the most frequently used location for child care (41.5 percent across all pay grades). Enlisted personnel in the highest pay grade (E7 to E9) were more than twice as likely as those in the lowest pay grade to use school as the child care location (31.4 percent and 14.3 percent, respectively), probably because those in the highest pay grade were likely to have been in the military longer and to have older children.

The primary reasons for choosing a particular child care arrangement were similar for personnel in all three pay grade categories (Table 3). Differences in responses across pay grades appeared to be consistent with the (expected) age of the Service member and, accordingly, with the age of the youngest dependent. For example, the lower paid personnel tended to be younger and to have younger dependents. Thus, they would logically be reluctant to entrust another young child with the care of a sibling.

### ***Family Type***

The family type categories considered for this analysis were based on whether the dependent(s) lived with the Service member. **Those members with dependents who did not live with them were classified as having "no custodial dependents."** As shown in Table 4, the choice of primary caregiver varied by family type. Grandparent/relative was the most prevalent choice for single enlisted personnel without custodial dependents (46.9 percent) and for those in dual-military marriages without custodial dependents (36.8 percent). For both single enlisted personnel and those in dual-military marriages *with* custodial dependents, school or day care was the most prevalent choice of child care for their youngest or only dependent. For enlisted personnel with a civilian spouse, the spouse or Service member was cited most often as the primary caregiver for both those with and without custodial dependents (44.3 and 47.0 percent, respectively).

The primary reason for choosing a child care arrangement also differed by family type. Single members with no custodial dependents and members with a civilian spouse preferred a family caregiver; however, single members with custodial dependents and members in dual-military marriages mentioned trust in the caregiver as the most important consideration for their choice of child care providers.



**Table 4. Child Care Characteristics for Enlisted Personnel by Family Type**

Child Care Characteristic	Weighted Total	Family Type					
		Single, No Custodial Dependents	Single with Custodial Dependents	Dual-Military, No Custodial Dependents	Dual-Military with Custodial Dependents	Civilian Spouse, No Custodial Dependents	Civilian Spouse with Custodial Dependents
Number							
Total Enlisted Personnel	584,434	19,959	30,931	5,956	60,599	42,562	424,427
Percent of Column Total							
Child's Primary Caregiver							
Sibling/Child	7.0	4.0	7.8	0.4	6.8	5.1	7.4
Non-Related	15.2	5.1	25.0	7.8	26.8	10.2	13.9
School/Day Care	29.3	25.5	49.5	33.5	50.0	19.5	25.9
Grandparent/Relative	9.0	46.9	14.7	36.8	5.4	20.9	5.8
Spouse/Service Member	39.5	18.5	3.1	21.6	11.1	44.3	47.0
Number							
Total Enlisted Personnel	529,223	14,167	28,982	5,090	57,728	34,342	388,914
Percent of Column Total							
Location of Care							
School	21.9	27.0	27.6	28.9	19.4	24.8	21.3
Day Care Center	23.3	14.7	35.1	31.6	48.9	13.7	19.6
Child's Home	41.4	41.1	19.3	24.5	16.8	44.2	46.7
Other Home	13.5	17.2	18.0	14.9	14.9	17.4	12.4
Number							
Total Enlisted Personnel	454,691	12,873	26,078	4,462	50,216	28,871	332,190
Percent of Column Total							
Reason for Choice							
Convenience	12.5	14.4	17.3	7.3	20.1	7.2	11.4
Quality	10.4	15.7	11.3	17.2	16.4	9.2	9.2
Cost	13.4	9.0	13.2	3.7	9.8	13.5	14.3
Availability	13.2	9.8	19.1	11.3	16.8	8.8	12.7
Trust in Caregiver	23.0	15.2	27.5	33.5	28.4	22.0	22.1
Prefer Family	27.5	35.9	11.7	27.1	8.4	39.4	30.3

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row of each grouping. Totals may differ slightly across tables because of missing data and rounding.

## Age of Youngest Dependent

As expected, the age of the youngest dependent influenced child care considerations. As shown in Table 5, children under 2 years old were cared for primarily by the Service member or his/her spouse; those between 2 and 13 years old were cared for equally by school/day care and spouse/Service member; and those 14 or older were most likely to care for themselves or to be cared for by a sibling. Again, irrespective of age of the youngest dependent, the most frequently given reasons for selecting a specific arrangement for child care were preference for a family caregiver and trust in the selected caregiver.

**Table 5. Child Care Characteristics for Enlisted Personnel by Age of Youngest Dependent**

Child Care Characteristic	Weighted Total	Age of Youngest Dependent				
		<1 Year	1 to <2 Years	2 to 5 Years	6 to 13 Years	14 to 22 Years
Number						
Total Enlisted Personnel	516,932	97,371	82,346	175,583	144,193	17,426
Percent of Column Total						
Child's Primary Caregiver						
Sibling/Child	7.3	0.6	0.6	1.4	18.0	47.5
Non-Related	16.1	20.6	22.9	17.9	8.7	1.9
School/Day Care	30.2	16.0	24.1	37.2	36.6	14.1
Grandparent/Relative	6.3	6.4	7.3	6.4	5.7	4.1
Spouse/Service Member	40.1	56.4	45.1	37.0	31.0	32.5
Number						
Total Enlisted Personnel	476,416	89,614	73,307	164,903	134,936	13,657
Percent of Column Total						
Location of Care						
School	21.4	5.7	7.1	17.7	43.2	32.5
Day Care Center	24.1	21.2	33.5	33.5	11.4	5.0
Child's Home	41.4	55.6	42.7	34.2	38.1	61.0
Other Home	13.1	17.5	16.7	14.7	7.3	1.4
Number						
Total Enlisted Personnel	409,098	76,411	67,974	148,858	107,921	7,920
Percent of Column Total						
Reason for Choice of Arrangement						
Convenience	12.8	7.9	9.4	14.6	16.4	7.6
Quality	10.3	7.5	10.1	13.3	8.2	10.2
Cost	13.7	13.6	16.7	13.1	12.8	8.6
Availability	13.6	10.9	13.7	13.8	15.4	9.4
Trust in Caregiver	23.3	27.8	25.8	24.5	16.7	24.6
Prefer Family	26.5	32.3	24.3	20.7	30.6	39.6

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row of each grouping. Totals may differ slightly across tables because of missing data and rounding.

## Officers

As was the case for enlisted personnel, all individual/family characteristics examined—Service branch, pay grade, race/ethnicity, gender, family type, age of youngest dependent, and location of residence (on base, off base)—were statistically significant with regard to the choice of caregiver for the youngest or only child, the location of child care, and the reasons for choosing a specific child care arrangement. This suggests that the distribution of responses for variables related to child care is not independent of the particular individual/family characteristic under consideration. Also as with enlisted personnel, four demographic characteristics—gender, pay grade, family type and age of youngest dependent—were highly significant with respect to these three characteristics of child care arrangements.

### Gender

A small percentage of female officers (12.5 percent) as compared with male officers (48.6 percent) relied on themselves or their spouse for care of the youngest or only child (Table 6). Women relied

**Table 6. Child Care Characteristics for Officers by Gender**

Child Care Characteristic	Weighted Total	Gender	
		Male	Female
Number			
Total Officers	112,326	102,244	10,082
Percent of Column Total			
Child's Primary Caregiver			
Sibling/Child	10.2	10.5	6.7
Non-Related	11.9	10.7	23.8
School/Day Care	29.9	27.8	51.8
Grandparent/Relative	2.7	2.5	5.2
Spouse/Service Member	45.3	48.6	12.5
Number			
Total Officers	107,304	97,539	9,765
Percent of Column Total			
Location of Care			
School	24.7	24.6	26.2
Day Care Center	17.0	15.2	35.3
Child's Home	51.9	54.2	29.0
Other Home	6.3	6.0	9.4
Number			
Total Officers	92,007	83,524	8,483
Percent of Column Total			
Reason for Choice of Arrangement			
Convenience	10.3	9.6	16.6
Quality	14.8	13.9	23.5
Cost	4.4	4.4	4.3
Availability	15.0	14.9	15.8
Trust in Caregiver	21.5	20.9	28.3
Prefer Family	34.1	36.4	11.5

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row for each grouping. Totals may differ slightly across tables because of missing data and rounding.

primarily on school or day care for child care (51.8 percent), followed by a non-related caregiver. The primary place of child care cited by male officers was the child's home (54.2 percent); however, for females it was the day care center (35.3 percent). A larger proportion of officers than enlisted personnel had their youngest or only child cared for at home, possibly because of generally better family financial situations among officers. This result was consistent with the reasons given by male and female Service members for choosing a particular child care arrangement. Females mentioned trust in the caregiver and quality as the most important reasons, while males mentioned preference for a family member and trust in the caregiver as the top two reasons.

### Pay Grade

For the three groups of characteristics related to child care (primary caregiver, location of care, and reason for choice of child care arrangement), differences among pay grade categories for officers, although statistically significant, were not as striking as for enlisted personnel (Table 7). Officers in the higher pay grades (O4 to O7) were more likely than those in the lower grades (O1 to O3) to indicate

**Table 7. Child Care Characteristics for Officers by Pay Grade**

Child Care Characteristic	Weighted Total	Pay Grade	
		O1 to O3	O4 to O7
		Number	
Total Officers	112,326	62,181	50,145
		Percent of Column Total	
Child's Primary Caregiver			
Sibling/Child	10.2	6.4	14.9
Non-Related	11.9	13.6	9.6
School/Day Care	29.9	30.6	29.1
Grandparent/Relative	2.7	3.2	2.2
Spouse/Service Member	45.3	46.2	44.2
		Number	
Total Officers	107,304	59,312	47,992
		Percent of Column Total	
Location of Care			
School	24.7	20.1	30.5
Day Care Center	17.0	21.6	11.4
Child's Home	51.9	50.4	53.8
Other Home	6.3	7.9	4.4
		Number	
Total Officers	92,007	52,504	39,503
		Percent of Column Total	
Reason for Choice of Arrangement			
Convenience	10.3	10.4	10.0
Quality	14.8	16.1	13.0
Cost	4.4	4.9	3.8
Availability	15.0	14.3	15.8
Trust in Caregiver	21.5	24.0	18.3
Prefer Family	34.1	30.3	39.1

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row for each grouping. Totals may differ slightly across tables because of missing data and rounding.

the child or a sibling as the child care provider of choice (14.9 percent and 6.4 percent, respectively). Age was probably a contributing factor to this result, since the siblings of children in the families of more highly paid officers would tend to be older and, presumably, more capable of child care than those of more junior officers. Also, officers in both pay grade categories were more likely to indicate a preference for family care as the reason for the choice of child care arrangement, with trust in caregiver being the second most frequently mentioned reason.

### Family Type

The primary child caregiver reported by officers also varied by family type (Table 8). School or day care was mentioned most often as the primary caregiver by single officers and members in dual-

**Table 8. Child Care Characteristics for Officers by Family Type**

Child Care Characteristic	Weighted Total	Family Type					
		Single, No Custodial Dependents	Single with Custodial Dependents	Dual-Military, No Custodial Dependents	Dual-Military with Custodial Dependents	Civilian Spouse, No Custodial Dependents	Civilian Spouse with Custodial Dependents
Number							
Total Officers	111,703	941	2,575	442	8,871	3,623	95,252
Percent of Column Total							
Child's Primary Caregiver							
Sibling/Child	10.2	13.1	19.2	8.2	4.9	13.2	10.3
Non-Related	11.8	6.9	15.7	13.9	29.2	10.8	10.1
School/Day Care	30.0	50.4	53.4	46.9	50.2	29.3	27.2
Grandparent/Relative	2.7	8.8	8.2	27.6	4.9	5.9	2.1
Spouse/Service Member	45.3	20.9	3.6	3.4	10.8	40.8	50.3
Number							
Total Officers	106,739	779	2,369	390	8,606	3,139	91,457
Percent of Column Total							
Location of Care							
School	24.7	51.7	35.9	12.6	20.0	34.7	24.3
Day Care Center	17.1	12.3	24.3	55.0	38.9	16.0	14.8
Child's Home	51.9	21.5	29.7	22.1	31.8	42.6	55.1
Other Home	6.3	14.5	10.2	10.4	9.3	6.7	5.8
Number							
Total Officers	91,521	679	2,213	342	7,675	2,908	77,703
Percent of Column Total							
Reason for Choice							
Convenience	10.3	12.7	22.2	0.0	16.4	9.3	9.4
Quality	14.7	32.8	15.7	32.9	23.0	16.0	13.6
Cost	4.4	8.0	5.0	13.8	2.8	5.9	4.5
Availability	15.0	23.9	21.5	17.0	17.1	14.2	14.5
Trust in Caregiver	21.5	6.9	24.1	29.9	31.8	21.8	20.5
Prefer Family	34.1	15.7	12.0	6.4	8.8	32.8	37.5

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row of each grouping. Totals may differ slightly across tables because of missing data and rounding.

military marriages, whereas care by the Service member or his/her spouse was mentioned most often by officers with a civilian spouse. Distinct differences were noted among officers with reference to the chosen location of their child care provider. Irrespective of custodial dependents, single officers were more likely to report that school was the location of their child care provider; dual-military officers reported day care centers most frequently; and officers married to civilians listed the child's home as the most frequent location of their child care provider.

Although more than one-third of officers overall indicated "prefer family" as the most important reason for choosing a child care arrangement, this preference was expressed primarily by those with a civilian spouse. In contrast, both single officers and those in dual-military families with custodial dependents cited "trust in caregiver" as the most important reason. For officers with no custodial dependents, quality of the facility was the most frequently reported reason for child care choice.

### ***Age of Youngest Dependent***

More than one-half of all officers with dependents 2 years old or younger indicated that the primary caregiver for their youngest or only child was the Service member or his/her spouse (Table 9). In fact, spouse/member was the most frequent choice for primary caregiver of officers when the youngest or only child was age 13 or younger. For those with their youngest or only child age 14 or older, the most frequently cited primary caregiver was the child or a sibling. With respect to the location of care, the child's home was the most frequently reported location, regardless of the age of the youngest child. School was also mentioned frequently as the location of care for children between 6 and 13 years old. "Prefer family" was the most frequently cited reason for the choice of child care arrangement, although "trust in caregiver" was almost as important for officers with a youngest or only child of 5 or younger.

**Table 9. Child Care Characteristics for Officers by Age of Youngest Dependent**

Child Care Characteristic	Weighted Total	Age of Youngest Dependent				
		<1 Year	1 to <2 Years	2 to 5 Years	6 to 13 Years	14 to 22 Years
Number						
Total Officers	106,873	15,603	14,329	32,573	38,620	5,728
Percent of Column Total						
Child's Primary Caregiver						
Sibling/Child	10.1	0.8	0.6	1.2	19.5	45.7
Non-Related	11.9	18.6	20.1	15.3	4.9	0.5
School/Day Care	29.8	18.3	25.2	36.5	32.5	15.6
Grandparent/Relative	2.5	3.7	3.2	2.2	2.1	1.1
Spouse/Service Member	45.9	58.6	50.9	44.8	41.0	37.1
Number						
Total Officers	102,593	14,949	13,977	31,663	37,109	4,883
Percent of Column Total						
Location of Care						
School	24.3	5.0	6.5	20.3	41.9	25.0
Day Care Center	17.0	20.1	27.4	26.2	6.1	0.6
Child's Home	52.5	65.5	56.6	46.1	48.6	73.2
Other Home	6.2	9.4	9.5	7.4	3.4	1.1
Number						
Total Officers	87,758	12,996	12,553	28,784	30,235	3,177
Percent of Column Total						
Reason for Choice of Arrangement						
Convenience	10.3	6.7	9.2	12.5	11.0	4.3
Quality	14.5	13.2	15.5	20.8	9.3	7.2
Cost	4.3	2.7	3.8	4.4	5.2	4.0
Availability	14.9	12.4	12.0	13.8	17.8	19.5
Trust in Caregiver	21.6	30.3	28.0	22.6	15.4	11.0
Prefer Family	34.3	34.7	31.4	25.9	41.3	54.0

Notes: Weighted percentages were computed as the proportion of the estimated totals shown in the first data row of each grouping. Totals may differ slightly across tables because of missing data and rounding.

## Multiple Regression Models

### Cost of Child Care

The dependent measure for this model is a continuous variable indicating the monthly cost of child care for the youngest or only child. Beta coefficients can therefore be interpreted as the increase (positive Beta) or decrease (negative Beta) in the cost (denoted in dollars) for child care associated with a one-unit change in an independent variable (in the case of a continuous variable) or the presence of a characteristic (in the case of a dichotomous variable).

The model was run separately for enlisted personnel and officers, and within each of those groups it was run separately for two subgroups. The "All Members with Family" subgroup includes *all* Service members with family (i.e., all those with dependents, whether custodial or not). The "Married Members with Family" subgroup includes only *married* Service members with family. The  $R^2$  values were 15 percent for the "All Members with Family" (total with family) group and 28 percent for the "Married Members with Family" (married with family) group.

#### Enlisted Personnel

For enlisted personnel, the model results were similar for the total with family and married with family groups (Table 10), except that the spouse's employment status was a significant variable for the married group. On average, enlisted male personnel spent about \$28 less on child care than did enlisted female personnel in the month before the survey. For enlisted personnel with custodial dependents,

**Table 10. Relative Effects of Independent Variables on Child Care Costs for Enlisted Personnel**

Significant Variables	Beta Coefficient	
	All Members with Family	Married Members with Family
<b>Gender (Female)</b>		
Male	-27.6	-18.1
<b>Housing (Off Base)</b>		
On Base	-13.0	-10.7
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>		
Single with Custodial Dependent(s)	29.2	na
Dual-Military with Custodial Dependent(s)	59.7	43.8
<b>Spouse's Occupation (Full-Time Civilian)</b>		
Part-Time Civilian	na	-45.1
Homemaker	na	-96.9
Other Occupation	na	-88.6
<b>Age of Youngest Dependent</b>	NS	-6.7
<b>Workable Child Care Arrangement for Long-Term Situation</b>	-26.8	-27.5
<b>Child Care Hours</b>	1.1	0.7
<b>Problems with Child Care During PCS Move</b>	-11.3	-10.2
<b>Satisfaction with DoD-Provided Child Care</b>	-15.8	-13.2

NS = not significant. na = not applicable (variable not included in model).

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.



those who were single and those in dual-military marriages spent more than those in the reference group (enlisted personnel with a civilian spouse and custodial dependent(s)). This result is not surprising, since earlier analysis showed that the children of Service members with a civilian spouse are more likely to receive child care at home. Interestingly, enlisted personnel in dual-military families spent more on child care than did single enlisted personnel.

As expected, more child care hours per week for the youngest child was associated with higher child care costs; however, the effect was not dramatic. An increase of 1 hour corresponded to an increase of just over \$1 in child care costs for the total with family group and just under \$1 for the married with family group. Perhaps there are "economies of scale" in child care, since the incremental cost of another hour of child care to the consumer (the Service member) appears to be low.

Three attitudinal variables were significantly related to the cost of child care: satisfaction with DoD-provided child care, problems with child care during PCS moves, and whether child care during a long-term situation (e.g., deployment) was realistically workable. Higher satisfaction with DoD-provided child care was associated with lower cost; evidently, enlisted personnel who were satisfied with less expensive DoD-provided care did not feel compelled to seek other, more expensive care elsewhere. This result appears to indicate that efforts to improve the service of DoD-sponsored facilities would pay dividends in the form of reduced child care costs for military personnel, who might be more inclined to choose less expensive care on base.

Enlisted personnel who reported that finding child care during a PCS move was a more serious problem also reported spending more on child care. Presumably, Service members who had fewer options for child care during a move paid more for the arrangements they found available.

Those personnel who indicated that they had a workable child care arrangement for long-term situations such as deployment tended to spend less on child care. This result appears to be consistent with the results for other attitudinal variables, since those who reported that they already had a workable solution would not be expected to pay more for another solution.

For married personnel with family (the married with family group), both the age of the youngest child and the spouse's employment were significantly correlated with the cost of child care. As the age of the youngest child increased, the monthly cost of child care decreased. Enlisted personnel with a spouse employed in a part-time civilian job or working as a homemaker reported spending less money on child care than those with a spouse in a full-time civilian job (the reference group). Those with a spouse working as a homemaker reported spending the least, presumably because the spouse tended to take care of the youngest child.

### **Officers**

For officers, the model fit for cost of child care was stronger than for enlisted personnel. The  $R^2$  measures were approximately .22 (22 percent of variation explained) for the total with family group and .33 (33 percent of variation explained) for the married with family group. The significant variables were generally the same as for the enlisted personnel model.

As was found for enlisted personnel, for officers the total with family group was similar to the married with family group. The following factors were associated with spending more on child care:

being female, having younger children, using more hours of child care, having more problems finding child care during PCS moves, and living off base. Dissatisfaction with DoD-provided child care was associated with more spending on child care for the total with family group, but the variable was not significant for the married with family group. Also, family type was only significantly related to cost of child care for the total with family group. Single officers and those in dual-military families tended to spend more on child care than those with a civilian spouse.

For the married with family group, the spouse's employment status had the strongest relationship with child care cost of the variables examined (Table 11). Officers with a spouse in the Reserves/National Guard reported paying approximately \$65 less per month for child care than those whose spouse had a full-time civilian job (the reference group). In fact, the spouse employment status that was associated with the highest child care cost was full-time civilian job, possibly because those families used more expensive off-base child care services for convenience.

**Table 11. Relative Effects of Independent Variables on Child Care Costs for Officers**

Significant Variables	Beta Coefficient	
	All Members with Family	Married Members with Family
<b>Gender (Female)</b>		
Male	-47.1	-27.9
<b>Housing (Off Base)</b>		
On Base	-21.0	-13.8
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>		
Single with Custodial Dependent(s)	50.7	na
Dual-Military with Custodial Dependent(s)	75.9	31.8
<b>Spouse's Occupation (Full-Time Civilian)</b>		
Reserves/National Guard	na	-64.9
Part-Time Civilian	na	-56.0
Homemaker	na	-107.9
Other Occupation	na	-83.8
<b>Age of Youngest Dependent</b>	-14.9	-21.3
<b>Workable Child Care Arrangement for Long-Term Situation</b>	-26.1	-22.2
<b>Child Care Hours</b>	0.8	0.5
<b>Problems with Child Care During PCS Move</b>	-18.6	-16.3
<b>Satisfaction with DoD-Provided Child Care</b>	-10.4	NS

NS = not significant. na = not applicable (variable not included in model).

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.

## Satisfaction with DoD-Provided Child Care

### Enlisted Personnel

This model was more informative than the model for cost of child care in that it showed what factors influence the perceptions of enlisted personnel about DoD-provided child care. The model fit was not striking, however, with  $R^2$  values of .12 for both the total with family group ("All Members with Family") and the married with family group ("Married Members with Family"). The fit was not expected to be high since the regression could not control for a myriad of other factors that might have an influence on satisfaction levels. The model did, however, uncover some interesting relationships that held true for both the total with family and married with family groups.

First, Service branch was related to satisfaction with DoD-provided care (Table 12). Air Force enlisted personnel tended to be less satisfied than Army personnel (the reference group). Navy and Marine Corps enlisted personnel reported satisfaction levels similar to those reported by Army personnel (and thus also tended to be more satisfied than their Air Force counterparts).

Secondly, enlisted personnel who used child care on base reported more satisfaction with DoD-provided care than those who used off-base care facilities. Presumably, Service members who were satisfied with DoD-provided, on-base care would have less incentive to seek child care arrangements off base. Unfortunately, it is impossible to tell from the survey whether dissatisfied personnel seek care off base because they are less satisfied with on-base care.

Finally, those enlisted personnel who had fewer problems finding child care during PCS moves tended to be more satisfied with DoD-provided child care in general. Again, the variable for problems with finding child care was reverse-coded (i.e., scaled from 1 = *Severe Problem* to 4 = *Not a Problem*), so that a positive Beta coefficient was associated with a positive move along the satisfaction scale toward *Very Satisfied*.

**Table 12. Relative Effects of Independent Variables on Satisfaction with DoD-Provided Child Care for Enlisted Personnel**

Significant Variables	Beta Coefficient	
	All Members with Family	Married Members with Family
<b>Service Branch (Army)</b>		
Air Force	-0.4	-0.4
<b>Location of Child Care (Off Base)</b>		
On Base	0.3	0.3
<b>Problems with Child Care During PCS Move</b>	0.3	0.3

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.

## Officers

The results for officers were similar to those for enlisted personnel except that there were more significant variables (Table 13). Additional variables that were related to satisfaction with DoD-provided child care services for officers were pay grade, location of housing (on or off base), and spouse's occupation. As was found for enlisted personnel, the model results were almost the same for the total with family and married with family groups; the model's  $R^2$  values for the groups were .09 (9 percent of variation explained) and .10 (10 percent explained), respectively.

**Table 13. Relative Effects of Independent Variables on Satisfaction with DoD-Provided Child Care for Officers**

Significant Variables	Beta Coefficient	
	All Members with Family	Married Members with Family
<b>Pay Grade (O1 to O3)</b>		
O4 to O7	-0.1	NS
<b>Service Branch (Army)</b>		
Air Force	-0.2	-0.2
<b>Location of Housing (Off Base)</b>		
On Base	-0.2	-0.2
<b>Location of Child Care (Off Base)</b>		
On Base	0.4	0.4
<b>Spouse's Occupation (Full-Time Civilian)</b>		
Part-Time Civilian	na	-0.4
Homemaker	na	-0.2
Other Occupation	na	-0.3
<b>Problems with Child Care During PCS Move</b>	0.3	0.3

NS = not significant. na = not applicable (variable not included in model).

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.

The effects of Service branch, problems finding child care during PCS moves, and location of child care were the same as for enlisted personnel. Air Force officers were less satisfied with DoD-provided child care, officers who had more problems finding child care were less satisfied, and officers who used on-base child care were more satisfied with DoD-provided child care in general.

Officers in higher pay grades were somewhat less satisfied with DoD-provided child care. The reason for this result may be that, as noted previously, DoD-provided child care tends to be less flexible in terms of hours and availability. More highly paid officers tend to opt for less crowded, more convenient child care facilities or care in the child's home. They would also be expected to choose higher quality child care, because they can more easily afford it.

Interestingly, officers in on-base housing (base/government housing, on board a Navy ship, or in a Navy lodge) tended to be less satisfied with DoD-provided child care than those living in housing off base (leased by the military, owned or rented by the Service member). Since officers living on base tend

to take advantage of DoD-provided child care, this result suggests that they are not as satisfied as those who are less likely to use the services. Perhaps officers on the whole are somewhat dissatisfied with DoD-provided child care services and feel that they might be better off with other arrangements, even if they were more costly (results from the cost of child care model indicated that dissatisfaction with DoD-provided services was associated with a higher monthly cost for child care).

For married officers, the spouse's occupation also played a significant role in satisfaction with DoD-provided child care. Officers with a spouse employed in a part-time civilian job, as a homemaker, or in the "other" job category (self-employed, unpaid, in school, etc.) reported less satisfaction with DoD-provided child care than did those with a spouse employed in a full-time civilian job. In general, the less fully employed the spouse tended to be, the more likely the Service member was to report dissatisfaction. As noted previously, officers tended to prefer having their spouse take care of their children when possible. Therefore, if they had options to DoD-provided child care, such as a spouse who was available to provide child care, they may have felt that the DoD-provided option was unsatisfactory by comparison. In contrast, officers with a spouse working full-time in a civilian job may have been more satisfied to receive DoD-provided child care.

## Logistic Regression Models

### Difficulty Responding to Recall/Alert Due to Child Care Problems

#### Enlisted Personnel

The dependent variable in this model was a measure of individual and family readiness for quick response. This measure specifically referred to difficulties as a result of child care problems, an issue that is important because of the large numbers of families in today's All-Volunteer Force and the implications for response to hazardous duty deployments such as Operations Desert Shield/Desert Storm. Differences between the total with family group (which includes such family types as single with dependents) and the subset of married Service members were expected to be significant.

Enlisted males in the total with family group of respondents were 60.7 percent less likely to report difficulties responding to recall/alert because of child care problems than were females in the same group. There was a similar but even more pronounced difference (64.8 percent) between males and females in the married with family group (Table 14).

**Table 14. Relative Odds of Experiencing Difficulties Responding to Recall/Alert Because of Child Care Problems for Enlisted Personnel**

Significant Variables	Relative Odds of Experiencing Difficulties (Percent)	
	All Members with Family	Married Members with Family
<b>Gender (Female)</b>		
Male	-60.7	-64.8
<b>Service Branch (Army)</b>		
Navy	72.3	90.4
Air Force	117.7	121.4
Marine Corps	104.0	116.6
<b>Location (OCONUS)</b>		
CONUS	32.4	34.3
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>		
Single with Custodial Dependent(s)	74.4	na
<b>Cost of Child Care</b>	0.3	0.3
<b>Problems with Child Care During PCS Move</b>	-24.5	-25.4

na = not applicable (variable not included in model).

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.

Military demographics had an important influence on the DIFFICULTY measure. For instance, of the enlisted Service members in the total with family group, those in the Army had the lowest odds of experiencing problems in responding quickly to recall/alert. Those in the Navy, Air Force, and Marine Corps were approximately 72 percent, 118 percent, and 104 percent more likely to have difficulties, respectively. The differences among the Service branches were even more noticeable for the married

with family group. Enlisted personnel stationed in the continental United States (CONUS) were more likely to have readiness difficulties related to child care than those stationed overseas.

For the total with family group, those enlisted personnel who were single and had a custodial dependent were about 74 percent more likely to have difficulties responding quickly to recall/alert than those with a civilian spouse and custodial dependents. This finding may suggest that single enlisted personnel with custodial dependents could benefit from special attention during recalls, alerts, or changes in work schedule.

Cost of child care was positively related to the likelihood of reporting difficulties. In other words, enlisted personnel who were paying more for child care also were more likely to report readiness difficulties due to that child care. Perhaps Service members who choose more expensive child care options (e.g., off base or in FDC facilities) may find that their arrangements are more difficult to change in response to a recall/alert situation. Child development centers (CDCs), which tend to be cheaper, are set up to accommodate single parents and dual-military families in situations that result from the demands of military life. Because the units of this explanatory variable are dollars per month, its impact does not appear to be strong (relative odds of .3); however, an increase of \$100/month in child care cost would be associated with a noteworthy 30 percent increase in the likelihood of difficulties.

Interestingly, enlisted personnel who reported more severe problems with finding child care during a PCS move were *less* likely to report readiness difficulties due to child care problems. This finding may indicate that CDCs, while possibly more accommodating during quick response situations, also tend to be harder to get into after a family move.

### **Officers**

For officers, differences in the model for the various demographic groups were more dramatic than those for enlisted personnel. There were also some additional significant variables related to difficulties responding to recall/alert, including age of the youngest dependent, the ability (inability) to take leave because of job demands, whether there was a dependable child care arrangement in the event of a long-term absence, and the spouse's occupation (Table 15). The fit of the models was also better than the fit of the models for enlisted personnel, with 20 percent of the variation in the dependent variable explained for the total with family group ( $R^2 = .20$ ) and 19 percent for the married with family group ( $R^2 = .19$ ).

Male officers were less likely to report readiness difficulties related to child care than were female officers (Table 15). No other individual demographic variables were found to be significant.

Marine Corps and Navy officers were more likely to report difficulties responding to recall/alert because of child care problems than were Army or Air Force officers. As was seen for enlisted personnel, officers stationed in the continental United States were more likely to report difficulties than their OCONUS counterparts.

For the total with family group, single officers with custodial dependents were almost 3.5 times<sup>3</sup> more likely to report difficulties than those who were married to a civilian spouse with custodial dependents (the reference group). Similarly, officers in dual-military families that included custodial

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<sup>3</sup>This estimate is derived as follows:  $[1 + (\text{relative odds} / 100)]$ . Zero percent relative odds would be equivalent to a value of 1, indicating equal likelihood or odds.

**Table 15. Relative Odds of Experiencing Difficulties Responding to Recall/Alert Because of Child Care Problems for Officers**

Significant Variables	Relative Odds of Experiencing Difficulties (Percent)	
	All Members with Family	Married Members with Family
<b>Gender (Female)</b>		
Male	-39.6	-35.8
<b>Service Branch (Army)</b>		
Navy	60.2	NS
Marine Corps	62.3	62.1
<b>Location (OCONUS)</b>		
CONUS	89.1	92.1
<b>Demands of Military Job (Prevented Taking Annual Leave)</b>		
Did Not Prevent Taking Annual Leave	36.8	NS
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>		
Single with Custodial Dependent(s)	248.3	na
Dual-Military with Custodial Dependent(s)	184.6	NS
<b>Spouse's Occupation (Full-Time Civilian)</b>		
Full-Time Military	na	187.2
<b>Age of Youngest Dependent</b>	14.9	NS
<b>Workable Child Care Arrangement for Long-Term Situation</b>	-51.3	NS

NS = not significant. na = not applicable (variable not included in model).

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.

dependents were almost 3 times as likely as the reference group to report readiness difficulties due to child care problems.

The older the youngest dependent, the *more* likely officers were to report difficulties. This is the opposite of what was expected, since Service members with younger dependents tend to have a greater need for child care. It may be that older dependents who are being cared for at home or in child care facilities off base are more difficult to place than younger children, who might be moved from one facility (e.g., a CDC) to another without much disruption in family life.

Those officers whose military jobs did not prevent them from taking annual leave were approximately 37 percent more likely to report readiness difficulties related to child care than were those who were prevented from taking annual leave. This result was somewhat surprising, since Service members who were busier on the job (assuming that those unable to take leave are busier) were expected to have more readiness difficulties.

As expected, officers who had workable dependent care arrangements for long-term situations (e.g., deployments) were less likely to experience difficulties in responding than were officers who did not have workable arrangements. However, this effect was significant only for the total with family group.



For the married group, the most powerful explanatory variable for difficulty responding to recall/alert was spouse's occupation. Officers whose spouses were employed full-time in the military were almost three times more likely to report difficulties than those whose spouses were employed in full-time civilian jobs. This is a telling statistic, because it suggests that even though DoD-provided child care is supposed to cater to the needs of dual-military families, officers with military spouses are still reporting readiness problems related to child care.

Several interesting comparisons can be made between the results of the DIFFICULTY models for officers and enlisted personnel. For instance, family type had a much more powerful influence for officers than for enlisted personnel. Single *officers* with custodial dependents were about 250 percent more likely to report difficulties than those with a civilian spouse and custodial dependents. In comparison, single *enlisted personnel* with custodial dependents were only about 75 percent more likely to report difficulties than those with a civilian spouse and custodial dependents. Also, officers in dual-military families were very likely to report difficulties, whereas this characteristic (military spouse) did not have a significant impact for enlisted personnel. Similarly, spouse's occupation (full-time military employment) was significantly related to difficulty for officers but not for enlisted personnel. Both of these statistics indicate that readiness difficulties due to child care arrangements are a greater problem for officers than for enlisted personnel, especially for single officers with dependents and those in dual-military marriages.

## **Child Care Location**

The dependent measure for the child care location model was a dichotomous variable indicating whether the Service member found child care arrangements on base (1) or off base (2). Like the DIFFICULTY model, the CCLOCATION model used logistic regression. Therefore, the results for the independent variables are expressed as a percent increase or decrease in the likelihood of occurrence of the dependent measure.

### ***Enlisted Personnel***

In terms of model fit, the CCLOCATION model was one of the best. For the total with family and married with family groups, the  $R^2$  measures were .35 (i.e., 35 percent of the variance explained) and .36, respectively. The variable with the strongest relationship to child care location, as expected, was housing location. Enlisted personnel who lived on base were 13 times more likely to use on-base child care than were those who lived off base (Table 16). This indicates that convenience has the strongest impact on the choice of child care location. Apparently this is an endorsement of DoD-provided care, or at least a suggestion that on-base care is adequate, since enlisted personnel living on base showed such a strong tendency to use it.

Male enlisted personnel in the total with family group were 18.9 percent less likely to report that their families used on-base (DoD-provided) child care than were females in the same group. There was no significant difference between the responses of males and females in the married group.

Family type had a stronger impact for the total with family group than did gender. Enlisted personnel in dual-military marriages with custodial dependents were 91.6 percent more likely to choose on-base care than were those with civilian spouses. This result is consistent with a wealth of other evidence which suggests that DoD-provided care is utilized to a greater extent by dual-military families than by families with one civilian parent.

**Table 16. Relative Odds of Using On-Base Child Care Arrangements: Enlisted Personnel**

Significant Variables	Relative Odds of Using On-Base Child Care (Percent)	
	All Members with Family	Married Members with Family
<b>Gender (Female)</b>		
Male	-18.9	NS
<b>Service Branch (Army)</b>		
Navy	-53.2	-52.8
Marine Corps	NS	23.4
<b>Location (OCONUS)</b>		
CONUS	-38.1	-36.9
<b>Housing Location (Off Base)</b>		
On Base	1,287.4	1,373.2
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>		
Dual-Military with Custodial Dependent(s)	91.6	NS
<b>Spouse's Occupation (Full-Time Civilian)</b>		
Full-Time Military	na	166.4
Part-Time Civilian	na	43.3
Other Occupation	na	31.0
<b>Age of Youngest Dependent</b>	-7.7	NS

NS = not significant. na = not applicable (variable not included in model).

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.

There was also a relationship between the age of dependents and the use of on-base child care. A 1-point decrease in the age of the youngest child (on the 7-point scale described in Table 1 on page 8) for enlisted personnel was accompanied by a 7.7 percent increase in the likelihood of using on-base child care. Although this relationship was not significant for the married group and not particularly strong for the total with family group, it suggests that enlisted personnel with younger children are using on-base child care at a higher rate. This effect was independent of the fact that enlisted personnel with younger families tend to be located on base (and therefore tend to take advantage of on-base child care) since the regression holds all other variables constant.

For both the total with family and married with family groups, enlisted personnel in the Navy were less likely than those in the Army, Air Force, and Marine Corps to use child care on base. For the total with family group, Army and Marine Corps were not significantly different in this respect. For the married with family group, Marine Corps enlisted personnel were 23.4 percent more likely to use on-base child care than were their Army counterparts.

Enlisted personnel stationed in CONUS locations were less likely to use on-base care than were those in OCONUS locations (38.1 percent less likely for the total with family group and 36.9 percent less likely for the married with family group). This result may be a reflection of the child care options available to OCONUS soldiers, who typically have fewer alternatives to DoD-provided care.

Finally, married enlisted personnel whose spouses were employed full-time in the Armed Forces, part-time in a civilian job, or in some other occupation were more likely to use on-base child care than were those whose spouses were employed full-time in a civilian job.

### Officers

The CCLOCATION models for officers were even stronger than those for enlisted personnel in terms of the ability of the independent variables to account for variation in the dependent variable (location of child care). For the total with family group, 47 percent of the variance was explained ( $R^2 = .47$ ), and for the married with family group, 48 percent was explained ( $R^2 = .48$ ). The list of significant variables for the model was slightly different for officers than for enlisted personnel. Pay grade emerged as a significant predictor of using on-base child care arrangements, whereas gender and spouse's occupation were not significant (Table 17).

**Table 17. Relative Odds of Using On-Base Child Care Arrangements: Officers**

Significant Variables	Relative Odds of Using On-Base Child Care (Percent)	
	All Members with Family	Married Members with Family
<b>Pay Grade (O1 to O3)</b>		
O4 to O7	-22.1	-21.3
<b>Service Branch (Army)</b>		
Navy	-42.9	-44.0
Marine Corps	-24.4	-26.7
<b>Location (OCONUS)</b>		
CONUS	-57.7	-57.7
<b>Housing Location (Off Base)</b>		
On Base	3,081.7	3,113.7
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>		
Single with Custodial Dependent(s)	69.9	na
Dual-Military with Custodial Dependent(s)	87.8	87.8
<b>Age of Youngest Dependent</b>	-17.3	-18.1

na = not applicable (variable not included in model).

Notes: Reference groups for dichotomous and categorical variables are shown in parentheses. Groups that were not significantly different from the reference group are not shown in the table; thus, the categories included for each variable may be different in different tables.

For the significant variables that were common to the models for officers and enlisted personnel, the directions of the relationships were the same. The following characteristics were associated with a higher likelihood of using on-base child care: being single or having a military spouse, having younger dependents, being in the Air Force or Army, being stationed OCONUS, and living on base.

In contrast to the results for enlisted personnel, pay grade was a significant predictor of child care location for officers. More highly paid officers were less likely to use DoD-provided child care. This result is consistent with the finding that more highly paid officers tend to prefer child care in the home over DoD-provided child care facilities (see Table 6 on page 18). The tendency for senior officers to

choose off-base facilities may or may not be a reflection of their perceptions about the quality of DoD-provided services.

Several comparisons can be made between the results for enlisted personnel and those for officers. First, officers who lived on base were over 30 times more likely to use on-base child care arrangements than those who lived off base (Table 17), whereas enlisted personnel living on base were only about 14 times more likely to use on-base child care than those living off base (Table 16). In other words, the positive effect that living on base had on the likelihood of using on-base child care arrangements was more than twice as strong for officers than it was for enlisted personnel. Secondly, for the discrete numerical variable *Age of Youngest Dependent*, a change of 1 point on the 7-point scale for the variable (see Table 1 on page 8) was associated with a change of 7.7 percent in the likelihood that enlisted personnel in the total with family group would use on-base child care arrangements. For enlisted personnel in the married with family group, the same variable (age of youngest dependent) was not significant. For officers, however, the age of the youngest dependent was significant for both the total and married with family groups, and the magnitude of its effect was more than twice that seen for the total enlisted personnel group. These results may indicate that officers tend to use on-base child care only when their children are very young, whereas enlisted personnel may tend to use on-base care for both young children and those that are older.

## Summary and Conclusions

The need to address child care issues has become a growing concern for the military, as the All-Volunteer Force increasingly accommodates single-parent families, dual-military families, and other changing demographic groups. Parental concern for trustworthy, flexible, and reliable child care is an especially serious problem during separations and deployments, such as Operations Desert Shield/Desert Storm. The demands of child rearing and other dependent care compete with routine military duties. Consequently, they are a factor in performance and readiness and, undoubtedly, play a role in recruitment, morale and retention.

This report provides basic information about the choices and problems of enlisted personnel and officers in arranging for child care. The *1992 Department of Defense Surveys of Officers and Enlisted Personnel and Their Spouses* included questions about the who, where, and why of child care arrangements, as well as a number of other child care issues.

In addition to providing a demographic profile of child care usage (choice of caregiver, reasons for choice), the report examines four questions related to child care for military families:

- What factors are related to the cost of child care?
- What demographics and features of military life are associated with satisfaction with DoD-provided child care services?
- Which Service members find it more difficult to respond quickly to recalls or alerts because of problems related to child care?
- What factors are related to the decision to choose child care services on or off base?

Regression models were used to examine the relationships between variables related to child care and those related to individual, family, and military demographics.

### Choice and Location of Caregiver

More than 40 percent of male enlisted personnel and officers relied on their spouses or themselves to provide child care at home. In contrast, about 50 percent of female enlisted personnel and officers placed their children in school or day care programs, and another 25 percent placed them with caregivers who were not family members.

In addition to the gender of the Service member, the choice of caregiver also varied according to family type and the age of the youngest or only child. Enlisted personnel and officers married to civilian spouses most frequently arranged for child care within their immediate families. However, single parents and dual-military couples usually relied upon a grandparent, another relative, a school, or a day care facility. Although care by the spouse or Service member was the main choice for children up to age 2, school and day care were used more frequently for children 2 to 13 years old. Children older than 13 tended to take care of themselves at home. Younger children, up to age 5, who were not cared for at home were usually placed in day care facilities. Older children usually received care in school facilities.

Although day care centers and school-based programs are frequently used, military families may still have difficulty meeting the need for child care. In balancing child care and the demands of military work, the greatest burden is felt by women, single parents, dual-military couples, and enlisted personnel and officers with young children. These Service members often rely on a child's siblings for child care.

## **Reason for Choice of Caregiver**

The most frequently given reasons for the choices of women, single parents, and dual-military couples in selecting a caregiver were trust and quality of care. In contrast, male members married to civilians most frequently reported that their choices were based on a preference for family members as care providers, followed by trust in the caregiver. The choice of child care differed slightly by pay grade, probably because pay grade is correlated with the age of the youngest child. Although members at all levels preferred home care, day care was the second most frequent choice for lower ranking enlisted personnel and officers (E1 to E6 and O1 to O3). School was the second choice of higher ranking members (E7 to E9 and O4 and above). Service members in less traditional, non-nuclear family situations were more likely to choose DoD-provided child care, probably because it tended to be more convenient and cost-effective. Interestingly, only a relatively small percentage of enlisted personnel (approximately 13 percent) and officers (4 percent) cited cost as the reason for their child care choices. Qualitative factors, such as quality of care and trust in caregiver, were more often cited.

## **Cost of Child Care**

Female Service members, military personnel of either gender married to civilians, and those living on military bases had lower monthly child care expenses than comparison groups: male members, single parents, dual-military couples, and those living off-base. Child care costs were lower for Service members who had a workable child care arrangement for long-term situations (e.g., deployments). Similarly, those who were satisfied with DoD-provided child care spent less, presumably because those who were satisfied with on-base facilities—such as child development centers (CDCs)—had no incentive to use more expensive services off base or in private homes.

Child care costs tended to increase as the spouse became more fully employed. For example, Service members whose spouses were employed in part-time civilian jobs or as homemakers reported lower child care costs than those whose spouses were employed in full-time civilian jobs or in the Armed Forces. Similarly, the older the youngest dependent, the less Service members tended to spend on child care. Although Service members with very young children tended to care for them at home, many Service members with relatively young children were frequent users of child care services, which tended to increase monthly child care costs.

## **Satisfaction with DoD-Provided Child Care**

Among enlisted personnel, the groups that were less satisfied with DoD-provided child care were those in the Air Force, those who had more severe problems finding child care during PCS moves, and those who used off-base child care facilities. There is no obvious rationale for the difference in satisfaction across Service branches. In contrast, enlisted personnel who had problems finding child care during moves would be expected to express dissatisfaction with DoD-provided child care services—especially since lack of availability is a problem with CDCs (the primary DoD-provided child care facility). Enlisted Service members who indicated use of on-base facilities tended to be satisfied with DoD-provided child care in general.

The same three relationships held true for officers. However, in contrast to the results for enlisted personnel, the location of the officers' housing (on or off base) was related to their satisfaction with DoD-provided child care. Even though officers who lived on base tended to use on-base child care facilities, they reported lower levels of satisfaction than those who lived off base. Officers in the higher pay grades also were less satisfied with DoD-provided services than were those in the lower grades.

## **Difficulty Responding to Recall/Alert Due to Child Care Problems**

Several individual and family demographics were significantly related to quick response difficulties due specifically to problems with child care arrangements. Male enlisted personnel and officers were less likely to experience difficulties than were females. Members whose spouses were employed and those who had long-term dependent care arrangements reported less difficulty in responding quickly to deployments. Single parents—both enlisted personnel and officers—reported more difficulty responding to alerts than did members with civilian spouses. Among officers, dual-military couples reported more difficulty responding to alerts than did officers with civilian spouses.

Enlisted personnel and officers living in CONUS locations reported more difficulties than those living in OCONUS locations. Enlisted personnel in the Navy, Air Force, and Marine Corps reported more difficulties than did Army enlisted personnel. Air Force and Marine Corps officers reported more difficulties than did Army or Navy officers.

## **Child Care Location**

A small set of individual, family, military, and job-related variables accounted for a large part of the variation in responses to a survey question that asked whether child care was obtained on-base. For both enlisted personnel and officers, the strongest factor related to whether or not child care was on-base was whether the family lived on base. Officers showed the strongest tendency to use on-base child care when they lived on base, almost 2.5 times higher than for enlisted personnel.

Several relationships were similar for enlisted personnel and officers. Dual-military couples (enlisted personnel and officers) were more likely to use on-base child care than were members married to civilian spouses. Single officers were more likely to use on-base child care than were officers married to civilians. Navy Service members were less likely to utilize on-base child care than were members of the other Services. Members living in OCONUS locations were more likely to use on-base care than were those living in CONUS locations.

With respect to gender, pay grade, and spouse's occupation, the relationships to on-base child care were different for enlisted personnel and officers. Female enlisted personnel used on-base child care more than enlisted males, but for officers, gender was not a factor. More highly paid officers used on-base child care more than officers in lower pay grades, but for enlisted personnel, pay grade was not a factor. Married enlisted personnel whose spouses were employed in full-time civilian jobs used on-base child care less than married enlisted personnel whose spouses had other types of occupations, but for officers, spouse's occupation was not a factor.

## Conclusions

In summary, the questions addressing child care arrangements and related issues in the 1992 surveys represent an initial inquiry into the importance of these issues for DoD policy and planning. Female enlisted personnel and officers, single parents, and dual-military couples bore the greatest child care burdens in terms of cost of child care and difficulty responding quickly to a recall/alert. Other findings from the child care analysis are as follows:

- Although most enlisted personnel and officers preferred to have their children cared for at home by family members, male Service members and members married to civilians were more able than others to make this choice. Still, more than 25 percent of male enlisted personnel and officers used day care or school-based child care facilities.
- Qualitative aspects of child care, such as trust in the caregiver and quality of the care, were cited much more frequently than cost as a rationale for the choice of child care arrangements.
- Single Service members and those in dual-military marriages spent more per month on child care and tended to use on-base child care facilities more often than did other Service members.
- Problems finding child care during PCS moves were associated with higher child care costs and lower satisfaction on the part of Service members.
- Single Service members with dependents continue to report readiness difficulties related to problems with arranging child care.

Since female enlisted personnel and officers, single parents, and dual-military couples constitute a larger proportion of the Armed Forces today than they have in the past, and since these groups rely heavily on child care facilities, continued monitoring of their unique needs and their satisfaction with the care their children are receiving would be helpful for DoD policymakers. The results of this report support the present DoD initiatives to expand child care programs at military installations and to give particular attention to single parents and dual-military couples.



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## Appendix A. Study Design

The 1992 *Department of Defense Surveys of Officer and Enlisted Personnel* comprised four separate samples: longitudinal, recruiters, members, and Active Guard/Reserve or Training and Administration of the Reserve (AGR/TAR) members. The sample design for this survey was a stratified sample selected from active duty personnel as of December 1991. The database used in the analysis for this report included all four samples combined.

### Sample Design

The samples were selected by probability methods. That is, each eligible individual had a non-zero, known probability of selection. This procedure allowed for the projection of the survey results to the target population. Sampling design for the 1992 surveys proceeded as follows: identify sampling frames, devise stratification scheme, select sampling methodology, decide sampling sizes, select sample, and develop weights. These steps are described in the following sections.

**Target population and sampling frames.** The target population is the group being estimated by the sample. For example, the target population for the recruiter sample was all recruiters. A sampling frame is a database that represents the target population from which a sample is drawn.

**Stratification.** Stratification is a sample design feature that seeks to reduce the variance of sample estimates by defining homogeneous subgroups of sampling units and selecting the samples independently within each stratum. In addition, stratification may be used to control subgroup sample sizes. For the 1992 surveys, the stratification variables were identifiers present in the Active Duty Military Master and Loss (M&L) File and in the Reserve Component Common Personnel Data System (RCCPDS). The longitudinal sample was not stratified, but it reflected the stratification carried out in the selection of the 1985 sample. The definitions of the stratification cells for the other three samples are identified below.

The target populations, sampling frames, stratification schemes, and sample sizes corresponding to each of the four samples selected for the 1992 surveys were as follows:

- The longitudinal sample consisted of a subsample of 11,999 from the personnel selected for the 1985 *Department of Defense Survey of Officers and Enlisted Personnel* who were still in the military as of December 1991. The sampling frame was based on the file of the 1985 sample and the 1992 M&L File.
- The recruiter sample consisted of 3,999 recruiters, approximately 1,000 per Service. The sampling frame was extracted from the 1992 M&L File.
- The member sample consisted of members on active duty as of December 1991 who were in the Service for 4 or more months and were neither recruiters nor included in the 1985 survey. The sample of 75,345 active military personnel was derived by selecting approximately 5,000 members from each of the 16 cells defined by Service, officer/enlisted status, and gender. The sampling frame was constructed from the M&L File.
- The AGR/TAR sample consisted of members included in the RCCPDS. The sample included approximately 500 AGR/TAR from each of the 14 cells defined by seven levels of Reserve

Component and officer/enlisted status (some cells had fewer than 500 members). A total of 5,484 full-time, support AGR/TAR members were selected.

**Sample selection.** The longitudinal sample was selected using simple random (equal probability) sampling of eligible from the 1985 survey. The recruiter sample was selected with simple random sampling from within each of the four Services. The member sample was selected with simple random sampling within each of the 16 previously cited strata. If there were fewer than 5,000 Service members in a member-sample stratum, all members were included in the sample. The AGR/TAR sample was selected by simple random sampling from within each of 14 sampling strata defined by Reserve Component and enlisted/officer status.

**Weighting.** Weights were developed to reflect the variable probabilities of selection and nonresponse adjustments. Weighting in sample surveys has several objectives: (a) to reflect varying probabilities of selection; (b) to adjust for sample losses due to nonresponse; and (c) to adjust for deficiencies in the sampling frame that may introduce bias.

Each sample selected for the 1992 surveys consisted of only a subset of its respective target population. Therefore, to represent the entire population, it was necessary to derive base weights that projected the sample to the populations covered by the sampling frames. The base weight is the reciprocal of the probability of selection. For the longitudinal sample, which did not involve stratification, the base weight (*BWT*) was computed as:

$$BWT = (\text{number in population in 1992}) / (\text{sample size}) \quad .$$

For the other three samples that were stratified, the base weight was computed within stratum as:

$$BWT_s = (\text{number in the stratum}) / (\text{stratum sample size}) \quad .$$

To account for nonresponse, the base weight was adjusted by a nonresponse factor. Nonresponse adjustment through weighting implies that, within adjustment cells, nonrespondents are similar to respondents with respect to the characteristics being measured by the survey. To develop the nonresponse adjustment, respondents and nonrespondents were partitioned into adjustment cells based on Service, status, and gender. For each of the four samples, the nonresponse adjustment was developed as all eligibles (respondents and nonrespondents) divided by all respondents. The nonresponse adjustment cells corresponded to the sampling strata. That is, for sampling stratum *S*, the nonresponse adjustment factor,  $F_s$ , is:

$$F_s = (\text{eligible})_s / (\text{respondents})_s$$

Multiplying the base weight by the corresponding nonresponse adjustment factor (i.e.,  $BWT_s \times F_s$ ) made the respondents represent not only the segment of the population they were sampled to represent but also nonrespondents in adjustment cell *S*.

The last phase of the weighting process involved raking to known population totals for various key characteristics. (Raking is a computational procedure that adjusts the final weight so that the weighted estimate from the sample corresponds to known totals for the groups defined by the raking variables.) Three levels of raking were performed. The first level of raking was indexed by Service, enlisted/officer status, and gender. Status was not used in raking the recruiters sample. The second level was indexed

by pay grade and race/ethnicity, and the third level by marital status. This process adjusted the weights so that the sum of the weights for respondents over the raking variables corresponded to the known counts of eligible respondents in the respective cells.

## Data Collection

**Questionnaire development.** Each of the 1992 survey instruments was constructed around a core set of questions comparable to those used in previous personnel surveys, particularly the *1985 Surveys of Officers and Enlisted Personnel*. The questionnaire content focused on information about personal and military background, family composition, economic status, preparedness, career plans, satisfaction with various aspects of military life, and assessment of military programs and services. In addition, the 1992 surveys included questions regarding Operations Desert Shield/Desert Storm. Separate instruments were administered to enlisted personnel and officers. The enlisted and officer questionnaires were nearly identical, except on questions relating to enlistment intentions and promotions.

**Administration.** The data collection for the 1992 surveys was conducted by the Defense Manpower Data Center (DMDC) from May to October 1992. First, the total sample was aggregated by unit. Any unit with more than one member selected for the survey was sent a pre-notification letter, advising the unit commander of the survey and requesting that a point-of-contact (POC) be appointed to receive and distribute the surveys. A total of 10,973 pre-notification letters were mailed to units in April 1992. Address correction was required for 667 (6 percent) of the units.

The first questionnaires were mailed to units for distribution to members beginning in late April and continuing through May 1992. If only one member from a unit was selected to participate in the survey, that member was sent the survey package directly (approximately 7 percent of the sample).

Although nonresponse is present in all voluntary surveys, the potential bias caused by nonresponse can be reduced by thorough nonresponse follow-up. In the 1992 study, nonresponse at the unit level was handled by sending three follow-up letters. The first letter notified the POCs of the units from which DMDC had not received the survey check lists; the second letter informed the POC that the roster of survey participants had not been received; and the third letter was a notification that the completed surveys had not been returned to DMDC. Follow-up questionnaires were mailed 1 to 2 months later to nonrespondents directly at their units.

**Response rates.** The initial 1992 sample consisted of 40,812 officers and 56,015 enlisted personnel, for a total of 96,827 members. According to POC-provided information, 6,557 individuals in the sample had separated from the military by the time the survey was administered. Ultimately, the number of eligible members was 90,270.

At the close of the data collection in October 1992, a total of 59,930 completed surveys (27,684 officers and 32,246 enlisted) had been received. The level of nonresponse varied by Service, pay grade, and gender. Response rates were calculated based on the number of completed returns and the number of eligible members. The adjusted response rates were 72 percent for officers, 62 percent for enlisted personnel, and 66 percent overall. Response rates by gender were 67 percent for males and 66 percent for females. Response rates for the Services were 72 percent for the Air Force, 71 percent for the Navy, 62 percent for the Marine Corps, and 59 percent for the Army.

Although the overall level of participation was quite high, response rates differed by subgroups (Table A1). In general, officers in the Navy and male officers in the Air Force had the highest response rates, while enlisted members in the Army had the lowest response rate.

**Table A1. Questionnaire Completion and Response Rates by Status, Gender, and Service Branch**

Status and Gender	Service Branch				
	Army	Navy	Marine Corps	Air Force	Total
<b>Total Complete (Number)</b>					
<b>Officers</b>	<b>7,349</b>	<b>8,160</b>	<b>4,189</b>	<b>7,986</b>	<b>27,684</b>
Male	4,178	4,343	3,910	4,420	16,851
Female	3,171	3,817	279	3,566	10,833
<b>Enlisted Personnel</b>	<b>7,237</b>	<b>8,517</b>	<b>6,995</b>	<b>9,497</b>	<b>32,246</b>
Male	4,236	4,899	4,254	5,257	18,646
Female	3,001	3,618	2,741	4,240	13,600
<b>Total</b>	<b>14,586</b>	<b>16,677</b>	<b>11,184</b>	<b>17,483</b>	<b>59,930</b>
Male	8,414	9,242	8,164	9,677	35,497
Female	6,172	7,435	3,020	7,806	24,433
<b>Response Rate (Percent)</b>					
<b>Officers</b>	<b>65.7</b>	<b>76.5</b>	<b>70.6</b>	<b>73.5</b>	<b>71.6</b>
Male	67.3	76.8	70.7	74.3	72.2
Female	63.6	76.3	68.6	72.5	70.7
<b>Enlisted Personnel</b>	<b>53.3</b>	<b>66.4</b>	<b>58.4</b>	<b>71.1</b>	<b>62.3</b>
Male	53.8	66.4	58.6	70.2	62.2
Female	52.6	66.4	58.1	72.2	62.6
<b>Total</b>	<b>58.9</b>	<b>71.0</b>	<b>62.4</b>	<b>72.2</b>	<b>66.3</b>
Male	59.8	70.9	63.8	72.0	66.6
Female	57.7	71.1	58.9	72.4	65.9

## Appendix B. Analysis Methodology

### Analysis Database

The initial database used for the series of reports on the 1992 *Department of Defense Surveys of Officer and Enlisted Personnel* was prepared using Statistical Analysis System (SAS) software for DoD use and served as the basis for a public-use tape. In the preparation of this file, the survey data were thoroughly edited, and analysis was carried out for key variables such as gender and race/ethnicity. In addition, constructed variables were developed from survey answers (e.g., total number of dependents), and from RCCPDS extracted information (e.g., location of current assignment—CONUS/OCONUS). Additional recodings and composite variables created during the course of this analysis are discussed in the next two sections.

**Extracting and recoding.** The first step in the construction of the analysis database was to extract from the original DoD file a SAS file that included only the variables identified in the analysis plan. During this extraction step, all SAS character variables were converted to numeric variables so that they could be used in SAS procedures. Several variable types need to be defined in order to explain the conversion. A categorical variable (e.g., race/ethnicity) has character values (e.g., 1 = *White*, 2 = *Black*) that represent possible categories or items. These variables were converted to numeric dichotomous (1 = *Yes*, 0 = *No*) variables, one for each category. To use the race/ethnicity example, dichotomous variables were created for *White* (1 = *White*, 0 = *Non-white*), *Black* (1 = *Black*, 0 = *Non-black*), and so on. An ordinal variable contains characters (e.g., 1 = *Very Well*, 2 = *Well*) that represent levels on a scale. These variables were simply made numeric in the analysis data set; some were used as is and some were subject to further recoding. A continuous variable is a numeric variable that has significant digits to the right of the decimal point; in other words, a continuous variable can have non-whole-number values. In contrast to categorical variables, continuous variables in the analysis data set were appropriate for models without modification.

The extracted data set was split into data sets for enlisted personnel and officers. Since the analysis was to be performed separately for these two groups, these restricted data sets were more manageable and facilitated processing. In addition to the general character to numeric conversions described above, a series of recodes had to be performed to prepare variables for use in tabulations or models, and to facilitate interpretation of the results. The following types of recodes were done:

- Valid skips were originally coded as SAS “special” missing values (.S). Following this convention, all “not applicable” responses were also recoded to the same special missing code (.S). This conversion differentiates these types of respondents from respondents who did not answer the question. A regular missing value is coded “.”.
- For multiple-response categories measured with an ordinal scale, codes were reverse-scored when the highest code indicated a negative response. For example, one question asked how well a spouse would take care of family finances in the member’s absence. It was answered using a scale that varied from *Very Well* (1) to *Very Poorly* (5). After recoding, *Very Well* was scored a 5, *Very Poorly* was scored a 1, and intermediate values were adjusted accordingly. This recoding facilitated interpretation of the results by making responses uniform in their direction.
- Dichotomous variables were created for variables that had a *No* response and several options for the *Yes* response. For example, in the Operations Desert Shield/Desert Storm (ODS/S) deployment

question, the four *Yes* responses (i.e., fewer than 3 months, 3 but fewer than 6 months, 6 but fewer than 9 months, and 9 months or more) to the ODS/S deployment question were collapsed into a single *Yes* category.

- Response categories that had one-character codes representing ranges of values were assigned a numerical value corresponding to the midpoint of the range. This conversion captured the different widths of the ranges. For example, one pre-specified response option for “Total Value of Pay” ranged from \$20,000 to \$30,000. The original code of 2 was changed to a value of \$25,000.

**Constructed variables.** New variables were developed using combinations of possible responses to a single question or of multiple questions (composite variables). One type of new variable consisted of combining categorical responses to several parts of a question. For example, respondents were asked how many dependents they had in each of several age groups (e.g., under 1 year, 1 to under 2 years). A continuous variable for youngest dependent was constructed by identifying the lowest non-missing answer (e.g., 2 dependents in the 1 to under 2 category) and entering the midpoint of the range (1.5 in this case) as the value of the new variable.

Composite variables were created in order to capture the information from several multiple-item questions with response categories consisting of ordinal scales, thereby reducing the number of variables to analyze. Factor analysis, a statistical technique that is used to identify a reduced number of dimensions or “factors” present in a group of variables, was used for this purpose. Factor analysis gives the analyst a systematic approach to understanding the interrelationships among items and uncovers groups of items that measure the same concept or issue.

The factor identification was performed with the SAS procedure PROC FACTOR, using the principal component approach to factor extraction (Mardia, Kent, & Bibby, 1979) and incorporating the final weight. Each principal component calculated is a linear combination of the original variables and has an eigenvalue which indicates how much variance is explained by that component or factor. “Factor loadings” describe the correlation of each original variable with the factor and indicate how much weight is assigned to each factor.

The initial matrix of factor loadings is difficult to interpret because many of the variables have moderate-size correlations with several factors. Through a process of rotation, the matrix is transformed by applying a nonsingular linear transformation which groups the coefficients more closely around 0, 1 or -1. Rotation makes assigning names to the common factors, which is always a subjective process, more objective by highlighting patterns. We used an orthogonal rotation, which maintains the axes of the matrix at a right angle. A variety of algorithms are used for orthogonal rotation. The most commonly used is the varimax method, which maximizes the variance of squared loadings and attempts to minimize the number of variables that have high loadings on a factor. We used the varimax method to enhance the interpretability of the factors. Cronbach’s coefficient Alpha was used to assess the reliability of the factors identified through interpretation of the rotated matrix. High coefficient Alphas (0.7 and above) indicate a reliable composite variable.

The construction of the variable PROBLEMS ENCOUNTERED WITH PCS MOVES is an example of using factor analysis to develop composite variables. Each of 18 different potential problems was rated by the respondent on a scale of *Very Serious Problem* to *Not a Problem*. A preliminary factor analysis reduced the 18 items to five dimensions, as shown in Table B1. Based on a member’s response to each of the 18 items, a “factor score” for each of the five dimensions was computed. The factor score

consisted of the mean of the codes associated with the individual items in a particular factor. The mean score was a continuous variable that could be used as a dependent or independent variable in the analysis.

**Table B1. Factors Identified as Problems Associated with Members' Most Recent PCS Moves**

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**Factor 1: Spouse/Dependent Considerations**

Item

- N Finding dependent medical care
- M Finding dependent dental care
- R Spouse adjusting to new environment
- Q Children adjusting to new environment
- G Finding civilian employment for spouse and dependents
- O Finding child care

**Factor 2: Financial**

Item

- C Costs of setting up new residence
- B Temporary lodging expense
- E Transportation costs incurred during move
- D Costs of selling/moving from old residence
- K Finding permanent housing
- A Adjusting to higher cost of living

**Factor 3: Career/Education**

Item

- H Continuing your education
- J Transferring college credits
- F Finding off-duty employment for yourself

**Factor 4: Personal Adjustment**

Item

- S Adjusting yourself to new environment
- L Finding shopping, recreational facilities

**Factor 5: Dual-Service Couple**

Item

- P Military treatment of dual-service couples
- 

In some cases a composite variable was constructed across items from questions on different scales. In these situations, the scales were standardized (with a mean of 0 and a standard deviation of 1) using the SAS procedure PROC STANDARD before doing factor analysis. The variable SATISFACTION WITH MILITARY LIFE was constructed in this fashion. It combined nine survey items: whether life in the military was as the respondent expected (5-point scale); whether the respondent was satisfied with personal freedom, the opportunity to serve one's country, working conditions, coworkers, military job stability, friendships, and frequency of moves (5-point scales); and satisfaction with overall military life (7-point scale). After standardization, factor analysis yielded factor loadings of 0.4 and above, which were significant enough to allow identification of common factors. Cronbach's coefficient Alpha was 0.81 for enlisted personnel, 0.79 for officers, and 0.81 for enlisted personnel and officers combined, which indicated reliable composite variables for all three data sets. The final composite was calculated



based on the mean of these standardized items for cases with at least five of the nine survey items present.

## Statistical Procedures

The choice of statistical procedures used for the analyses conducted for this report was determined by the nature of the variables and the research questions. In general, the analysis began with descriptive tabs, proceeded to simple descriptive tests (i.e., Chi-square), and then concluded with a complex model (either logistic or multiple regression).

A *Chi-square test* of independence, which is a test for the degree of association between two categorical variables, was used as a first step in the analysis to identify statistically significant relationships between pairs of categorical variables. Measures of association were then computed after dependence had been demonstrated.

*Logistic regression* was used to determine the relative importance of particular sets of dichotomous or continuous independent variables on whether an event (e.g., experiencing difficulty responding to recall or alert) occurred or not. In developing the model, the dependent variable was represented by a dichotomous variable. With this procedure it was possible: (a) to statistically assess the relative importance of each explanatory (independent) variable on the outcome measure (i.e., the dependent variable); and (b) to test the applicability of the overall model. Relative odds, expressed as percentages, were computed from the Beta coefficients  $[(e^B - 1) \times 100]$  to indicate the increase or decrease in the likelihood of an outcome compared to a reference group. For example, relative odds of -39 percent for males compared to females (the reference group) indicate that males are 39 percent less likely to have difficulties than females. For a continuous variable, such as age, the relative odds refer to the impact of an increase of one unit (in this case, a year of age).

*Multiple regression* was used to examine the relationship of a set of independent variables with the expected level of a dependent variable. This statistical procedure was applied when the dependent variable was continuous or ordinal. The value of the *t*-statistic was used to determine which variables should be kept in the model by examining the significance of the coefficients associated with the explanatory variables. The significance of the overall model was measured using the *F* statistic, which was based on the Wald Chi-square statistic, and an additional *F* test was used to assess the significance of the *increases* in the overall quality of the model when new sets of variables were entered. Variables were entered in related groups; that is, a systematic, hierarchical modeling approach was used. The final model was determined by eliminating variables with coefficients that were not statistically significant at the 5 percent level.

## Computing Software

The SAS<sup>®</sup> software was used to extract data from the initial database provided by the DoD, construct variables, and run descriptive tabulations. When the analysis graduated to descriptive tests and models, however, SAS was not appropriate. The sample design and estimation procedure for the 1992 surveys had to be incorporated into the estimation of test statistics. Since survey data sets were based on a complex sample design and estimation approach, the SURvey Data ANALysis (SUDAAN) software was used to perform the modeling and compute test statistics used in the analyses.

SUDAAN calculates model parameters, sampling errors, and test statistics for a variety of statistical procedures, including coefficients of linear regressions and loglinear models. The software uses Taylor series linearization to approximate functions of linear statistics (e.g., means and linear regression coefficients) estimated from the sample data. It also accommodates weights that reflect varying probabilities of selection and other adjustments.

Three SUDAAN procedures—CROSSTAB, REGRESS, and LOGISTIC—were used in the analysis for this report. These procedures allow for specification of the levels of stratification and the incorporation of the final weight associated with each observation when doing estimation and variance calculations. CROSSTAB produces estimates of population totals and proportions, and a test of independence for each two-way table. The test statistic is based on the Wald statistic, which is distributed as Chi-square with  $(R - 1)(C - 1)$  degrees of freedom, where  $R$  = row and  $C$  = column. The REGRESS procedure fits multiple regression models to survey data. The statistical approach consists of estimating the regression coefficients by first forming the Horvitz-Thomson estimators of the population sums of squares and cross product matrices, and then using the Taylor series method to estimate the variance-covariance matrix of the coefficients. The LOGISTIC procedure fits logistic regression models to sample survey data so that the model parameter estimates and their variance-covariance matrix accurately accounts for the survey design. The Beta coefficients can be interpreted as linear regression coefficients and expressed as relative odds by  $(e^B - 1) \times 100$ .

## Statistical Backup

Tables B2 through B13 show the regression coefficients (estimated Betas) and associated  $p$  values for the test of the hypothesis that the Beta coefficient is zero for each of the four dependent variables presented in the report. The results for enlisted personnel and officers are presented separately.

**Table B2. Multiple Regression Results for Child Care Costs (Dependent Variable = COSTOFCARE):  
Enlisted Personnel with Family**

Explanatory Variable	Total			Married		
	Beta Coefficient		p Value for H:B = 0	Beta Coefficient		p Value for H:B = 0
	Value	S.E.		Value	S.E.	
Gender (Female)						
Male	-27.62	4.98	<0.01	-18.14	4.96	<0.01
Housing (Off Base)						
On Base	-13.00	4.83	0.01	-10.66	4.64	0.02
Family Type (Civilian Spouse with Custodial Dependent(s))						
Single with Custodial Dependent(s)	29.19	8.09	<0.01	na	na	na
Dual-Military with Custodial Dependent(s)	59.72	6.66	<0.01	43.78	13.33	<0.01
Spouse's Occupation (Full-Time Civilian)						
Full-Time Military	na	na	na	-23.04	14.00	0.10
Reserves or National Guard	na	na	na	-16.01	34.80	0.65
Part-Time Civilian	na	na	na	-45.09	9.76	<0.01
Homemaker	na	na	na	-96.91	6.63	<0.01
Other Occupation	na	na	na	-88.56	6.21	<0.01
Age of Youngest Dependent	*	*	*	-6.66	2.22	<0.01
Workable Child Care Arrangement for Long Term	-26.83	10.87	0.01	-27.51	11.01	0.01
Child Care Hours	1.08	0.14	<0.01	0.65	0.14	<0.01
Problems with Child Care During PCS Move	-11.27	2.14	<0.01	-10.19	2.06	<0.01
Satisfaction with DoD-Provided Child Care	-15.81	3.45	<0.01	-13.24	3.71	<0.01

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

na = Variable not included in model.

\* = Not statistically significant at the 0.05 level.

**Table B3. Multiple Regression Results for Child Care Costs (Dependent Variable = COSTOFCARE):  
Officers with Family**

Explanatory Variable	Total			Married		
	Beta Coefficient		p Value for H:B = 0	Beta Coefficient		p Value for H:B = 0
	Value	S.E.		Value	S.E.	
<b>Gender (Female)</b>						
Male	-47.14	4.90	<0.01	-27.91	4.84	<0.01
<b>Housing (Off Base)</b>						
On Base	-20.95	4.01	<0.01	-13.80	3.75	<0.01
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>						
Single with Custodial Dependent(s)	50.71	9.99	<0.01	na	na	na
Dual-Military with Custodial Dependent(s)	75.89	6.57	<0.01	31.83	9.17	<0.01
<b>Spouse's Occupation (Full-Time Civilian)</b>						
Full-Time Military	na	na	na	3.89	10.51	0.71
Reserves or National Guard	na	na	na	-64.90	31.80	0.04
Part-Time Civilian	na	na	na	-55.96	7.24	<0.01
Homemaker	na	na	na	-107.89	5.52	<0.01
Other Occupation	na	na	na	-83.83	5.57	<0.01
<b>Age of Youngest Dependent</b>	-14.88	1.90	<0.01	-21.30	1.74	<0.01
<b>Workable Child Care Arrangement for Long Term</b>	-26.12	11.38	0.02	-22.24	10.27	0.03
<b>Child Care Hours</b>	0.77	0.11	<0.01	0.54	0.10	<0.01
<b>Problems with Child Care During PCS Move</b>	-18.55	1.91	<0.01	-16.26	1.80	<0.01
<b>Satisfaction with DoD-Provided Child Care</b>	-10.39	3.60	<0.01	*	*	*

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

na = Variable not included in model.

\* = Not statistically significant at the 0.05 level.

**Table B4. Multiple Regression Results for Satisfaction with DoD-Provided Child Care  
(Dependent Variable = SATISFACTION): Enlisted Personnel with Family**

Explanatory Variable	Total			Married		
	Beta Coefficient		p Value for H:B = 0	Beta Coefficient		p Value for H:B = 0
	Value	S.E.		Value	S.E.	
Service Branch (Army)						
Navy	-0.02	0.09	0.84	-0.02	0.09	0.85
Air Force	-0.40	0.08	<0.01	-0.40	0.08	<0.01
Marines	-0.08	0.10	0.47	-0.07	0.10	0.50
Location of Child Care (Off Base)						
On Base	0.33	0.07	<0.01	0.34	0.07	<0.01
Problems with Child Care During PCS Move	0.30	0.03	<0.01	0.30	0.03	<0.01

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

**Table B5. Multiple Regression Results for Satisfaction with DoD-Provided Child Care  
(Dependent Variable = SATISFACTION): Officers with Family**

Explanatory Variable	Total			Married		
	Beta Coefficient		p Value for H:B = 0	Beta Coefficient		p Value for H:B = 0
	Value	S.E.		Value	S.E.	
Pay Grade (O1 to O3)						
O4 to O7	-0.11	0.06	0.05	*	*	*
Service Branch (Army)						
Navy	0.08	0.07	0.25	0.09	0.08	0.24
Air Force	-0.19	0.07	0.01	-0.17	0.07	0.01
Marines	0.11	0.08	0.16	0.13	0.08	0.09
Location of Housing (Off Base)						
On Base	-0.22	0.07	<0.01	-0.18	0.07	0.01
Location of Child Care (Off Base)						
On Base	0.37	0.07	<0.01	0.35	0.07	<0.01
Spouse's Occupation (Full-Time Civilian)						
Full-Time Military	na	na	na	-0.21	0.11	0.06
Reserves or National Guard	na	na	na	-0.35	0.49	0.47
Part-Time Civilian	na	na	na	-0.36	0.13	0.01
Homemaker	na	na	na	-0.23	0.08	0.01
Other Occupation	na	na	na	-0.32	0.08	<0.01
Problems with Child Care During PCS Move	0.29	0.03	<0.01	0.29	0.03	<0.01

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

na = Variable not included in model.

\* = Not statistically significant at the 0.05 level.

**Table B6. Logistic Regression Results for Difficulties Responding to Recall/Alert Because of Child Care Problems (Dependent Variable = DIFFICULTY): Enlisted Personnel, All Members with Family**

Explanatory Variable	Beta Coefficient		p Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
Gender (Female)						
Male	-0.93	0.14	<0.01	-60.7	-48.2	-70.1
Service Branch (Army)						
Navy	0.54	0.17	<0.01	72.3	140.4	23.5
Air Force	0.78	0.16	<0.01	117.7	197.9	59.1
Marines	0.71	0.20	<0.01	104.0	201.9	37.9
Location (OCONUS)						
CONUS	0.28	0.14	0.05	32.4	74.3	0.7
Family Type (Civilian Spouse with Custodial Dependent(s))						
Single with Custodial Dependent(s)	0.56	0.25	0.03	74.4	184.6	6.8
Dual-Military with Custodial Dependent(s)	0.21	0.20	0.28	23.7	83.1	-16.4
Cost of Child Care	0.00	0.00	<0.01	0.3	0.3	0.3
Problems with Child Care During PCS Move	-0.28	0.06	<0.01	-24.5	-15.1	-32.9

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

**Table B7. Logistic Regression Results for Difficulties Responding to Recall/Alert Because of Child Care Problems (Dependent Variable = DIFFICULTY): Enlisted Personnel, Married Members with Family**

Explanatory Variable	Beta Coefficient		p Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
Gender (Female)						
Male	-1.04	0.12	<0.01	-64.8	-55.4	-72.1
Service Branch (Army)						
Navy	0.64	0.18	<0.01	90.4	171.0	33.8
Air Force	0.80	0.17	<0.01	121.4	209.0	58.7
Marines	0.77	0.21	<0.01	116.6	226.9	43.5
Location (OCONUS)						
CONUS	0.30	0.15	0.05	34.3	80.2	0.1
Cost of Child Care	0.00	0.00	<0.01	0.3	0.3	0.3
Problems with Child Care During PCS Move	-0.29	0.06	<0.01	-25.4	-16.1	-33.7

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

**Table B8. Logistic Regression Results for Difficulties Responding to Recall/Alert Because of Child Care Problems (Dependent Variable = DIFFICULTY): Officers, All Members with Family**

Explanatory Variable	Beta Coefficient		p Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
Gender (Female)						
Male	-0.50	0.15	<0.01	-39.6	-18.9	-55.0
Service Branch (Army)						
Navy	0.47	0.20	0.02	60.2	137.0	8.2
Air Force	0.25	0.18	0.17	28.5	82.9	-9.7
Marines	0.48	0.23	0.04	62.3	154.7	3.4
Location (OCONUS)						
CONUS	0.64	0.18	<0.01	89.1	169.1	32.9
Demands of Military Job (Prevented Taking Annual Leave)						
Did Not Prevent Taking Annual Leave	0.31	0.15	0.04	36.8	83.5	1.9
Family Type (Civilian Spouse with Custodial Dependent(s))						
Single with Custodial Dependent(s)	1.25	0.35	<0.01	248.3	591.7	75.4
Dual-Military with Custodial Dependent(s)	1.05	0.24	<0.01	184.6	355.6	77.8
Age of Youngest Dependent	0.14	0.07	0.05	14.9	31.8	0.2
Workable Child Care Arrangement for Long Term	-0.72	0.36	0.05	-51.3	-1.4	-76.0

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

**Table B9. Logistic Regression Results for Difficulties Responding to Recall/Alert Because of Child Care Problems (Dependent Variable = DIFFICULTY): Officers, Married Members with Family**

Explanatory Variable	Beta Coefficient		<i>p</i> Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
Gender (Female)						
Male	-0.44	0.16	0.01	-35.8	-12.1	-53.1
Service Branch (Army)						
Navy	0.36	0.20	0.07	43.2	111.9	-3.2
Air Force	0.16	0.18	0.39	17.1	66.7	-17.7
Marines	0.48	0.23	0.03	62.1	154.4	3.3
Location (OCONUS)						
CONUS	0.65	0.18	<0.01	92.1	173.4	35.0
Spouse's Occupation (Full-Time Civilian)						
Full-Time Military	1.06	0.43	0.01	187.2	567.1	23.6
Reserves or National Guard	0.52	0.94	0.58	67.9	959.5	-73.4
Part-Time Civilian	0.35	0.31	0.26	41.2	159.2	-23.1
Homemaker	-0.31	0.24	0.19	-26.7	17.3	-54.2
Other Occupation	0.18	0.22	0.42	19.1	83.3	-22.6

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

**Table B10. Logistic Regression Results for Use of On-Base Child Care Arrangements**  
(Dependent Variable = CCLOCATION): Enlisted Personnel, All Members with Family

Explanatory Variable	Beta Coefficient		p Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
Gender (Female)						
Male	-0.21	0.10	0.04	-18.9	-1.4	-33.4
Service Branch (Army)						
Navy	-0.76	0.12	<0.01	-53.2	-40.8	-63.0
Air Force	0.18	0.10	0.08	19.7	45.6	-1.6
Marines	-0.09	0.12	0.46	-8.6	15.6	-27.8
Location (OCONUS)						
CONUS	-0.48	0.10	<0.01	-38.1	-24.7	-49.1
Housing Location (Off Base)						
On Base	2.63	0.09	<0.01	1,287.4	1,555.0	1,063.0
Family Type (Civilian Spouse with Custodial Dependent(s))						
Single with Custodial Dependent(s)	0.06	0.17	0.71	6.2	48.2	-23.9
Dual-Military with Custodial Dependent(s)	0.65	0.14	<0.01	91.6	152.0	45.6
Age of Youngest Dependent	-0.08	0.04	0.04	-7.7	-0.2	-14.6

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

**Table B11. Logistic Regression Results for Use of On-Base Child Care Arrangements**  
(Dependent Variable = CCLOCATION): Enlisted Personnel, Married Members with Family

Explanatory Variable	Beta Coefficient		<i>p</i> Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
Service Branch (Army)						
Navy	-0.75	0.12	<0.01	-52.8	-40.2	-62.7
Air Force	0.21	0.11	0.05	23.4	53.1	-0.6
Marines	-0.06	0.13	0.66	-5.8	21.5	-27.0
Location (OCONUS)						
CONUS	-0.46	0.11	<0.01	-36.9	-21.7	-49.1
Housing Location (Off Base)						
On Base	2.69	0.09	<0.01	1,373.2	1,657.4	1,134.9
Spouse's Occupation (Full-Time Civilian)						
Full-Time Military	0.98	0.28	<0.01	166.4	361.3	53.9
Reserves or National Guard	-0.22	0.60	0.71	-19.7	160.1	-75.2
Part-Time Civilian	0.36	0.17	0.03	43.3	100.0	2.7
Homemaker	0.03	0.13	0.81	3.0	32.9	-20.1
Other Occupation	0.27	0.12	0.03	31.0	65.7	3.5

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.



**Table B12. Logistic Regression Results for Use of On-Base Child Care Arrangements**  
(Dependent Variable = CCLOCATION): Officers, All Members with Family

Explanatory Variable	Beta Coefficient		p Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
<b>Pay Grade (O1 to O3)</b>						
O4 to O7	-0.25	0.08	<0.01	-22.1	-8.9	-33.4
<b>Service Branch (Army)</b>						
Navy	-0.56	0.11	<0.01	-42.9	-29.1	-54.0
Air Force	-0.01	0.10	0.91	-1.0	20.4	-18.6
Marines	-0.28	0.11	0.01	-24.4	-6.2	-39.1
<b>Location (OCONUS)</b>						
CONUS	-0.86	0.11	<0.01	-57.7	-47.5	-65.9
<b>Housing Location (Off Base)</b>						
On Base	3.46	0.09	<0.01	3,081.7	3,695.5	2,567.2
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>						
Single with Custodial Dependent(s)	0.53	0.20	0.01	69.9	151.4	14.8
Dual-Military with Custodial Dependent(s)	0.63	0.12	<0.01	87.8	137.5	48.4
<b>Age of Youngest Dependent</b>	-0.19	0.04	<0.01	-17.3	-10.6	-23.5

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.

**Table B13. Logistic Regression Results for Use of On-Base Child Care Arrangements**  
(Dependent Variable = CCLOCATION): Officers, Married Members with Family

Explanatory Variable	Beta Coefficient		p Value for H:B = 0	Relative Odds		
	Value	S.E.		Percent	Upper Bound	Lower Bound
<b>Pay Grade (O1 to O3)</b>						
O4 to O7	-0.24	0.09	0.01	-21.3	-6.2	-34.1
<b>Service Branch (Army)</b>						
Navy	-0.58	0.11	<0.01	-44.0	-30.5	-54.9
Air Force	-0.04	0.10	0.67	-3.9	16.9	-21.0
Marines	-0.31	0.11	<0.01	-26.7	-9.0	-40.9
<b>Location (OCONUS)</b>						
CONUS	-0.86	0.11	<0.01	-57.7	-47.5	-65.9
<b>Housing Location (Off Base)</b>						
On Base	3.47	0.09	<0.01	3,113.7	3,733.6	2,594.0
<b>Family Type (Civilian Spouse with Custodial Dependent(s))</b>						
Dual-Military with Custodial Dependent(s)	0.63	0.12	<0.01	87.8	137.5	48.4
<b>Age of Youngest Dependent</b>	-0.20	0.04	<0.01	-18.1	-11.4	-24.3

Note: Reference groups for dichotomous and categorical variables are shown in parentheses.



## 1992 Department of Defense Survey of Military Spouses

The Department of Defense is conducting a survey of people married to active duty military personnel from the Army, Navy, Marine Corps and Air Force. You have been selected to participate in this important survey. Please read the instructions on the next page before you begin the survey.

### PRIVACY NOTICE

**AUTHORITY:** P.L. 99-145, Sec. 804

**ROUTINE USES:** None

**PRINCIPAL PURPOSE OR PURPOSES:** Information collected in this survey is used to sample attitudes and/or discern perceptions of social problems observed by spouses of service members and to support additional manpower research activities. This information will assist in the formulation of policies which may be needed to improve military family programs and services.

**DISCLOSURE:** Voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that data will be complete and representative. Your survey instrument will be treated as confidential. All identifiable information will be used only by persons engaged in, and for the purposes of, the survey. Only group statistics will be reported.

### SURVEY PURPOSE

This is the second DoD-wide survey of this kind. It focuses on family well-being and family programs from the perspective of people married to active-duty military members. Your information will be combined with that provided by the other women and men married to military members in each of the four Services. The combined information will be used by the Services and the Department of Defense to evaluate the effectiveness of current policies and programs and to plan new ones. In addition to the information requested on the form, any additional comments you would like to make can be written on the enclosed comment sheet.

#### OFFICE USE ONLY

- ☐ PND
- ☐ NR
- ☐ R
- ☐ NE



## IMPORTANT NOTICE

1. This survey is addressed to you as a SPOUSE of an Active Duty member and asks for your views as a SPOUSE.
2. If you are also a member of the military, you may also be asked to fill out a survey specifically designed for officer or enlisted personnel.
3. This survey for spouses is different from the ones for members of the military. Please fill out this survey AND one for members if you receive one.

Have you received the 1992 DoD Survey of Officer and Enlisted Personnel at your unit or in the mail? Mark One.

- ☐ No  
☐ Yes

## PLEASE CONTINUE WITH THIS SURVEY

### I THE MILITARY WAY OF LIFE

First, we'd like some information and opinions about military life, including such things as your location, moving, family separation, and current policies.

1. Is the housing that you live in now: Mark One.

- ☐ Military housing  
☐ Leased by the military for Service families  
☐ Owned or being bought by you or someone in your household  
☐ Rented for cash  
☐ Owned by someone else and let without payment of cash rent

2. As of today, how many months have you been living at your present geographic location?

- ☐ Less than one month

- Record the number of months in the boxes.

(For example, if your answer is 35 months, enter 035).

- Mark the matching circle below each box.

Number Months

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

3. Are you presently at the same geographic location as your spouse? Mark One.

- ☐ Yes  
☐ No (GO TO Q5)

4. Did the government pay for you/dependents to accompany (join) your spouse at your present location? Mark One.

- ☐ Yes, completely  
☐ Yes, partially  
☐ No

8. During your marriage, how many times has your spouse moved because of his/her permanent changes of station (PCS)?

- |                         |                                  |
|-------------------------|----------------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 6          |
| <input type="radio"/> 1 | <input type="radio"/> 7          |
| <input type="radio"/> 2 | <input type="radio"/> 8          |
| <input type="radio"/> 3 | <input type="radio"/> 9          |
| <input type="radio"/> 4 | <input type="radio"/> 10 or more |
| <input type="radio"/> 5 |                                  |

9. During your marriage, how many times did you move because of your spouse's permanent changes of station (PCS)?

- |                         |                                  |
|-------------------------|----------------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 6          |
| <input type="radio"/> 1 | <input type="radio"/> 7          |
| <input type="radio"/> 2 | <input type="radio"/> 8          |
| <input type="radio"/> 3 | <input type="radio"/> 9          |
| <input type="radio"/> 4 | <input type="radio"/> 10 or more |
| <input type="radio"/> 5 |                                  |

10. How many total years have you spent at the same overseas location with your spouse?

- ☐ Not applicable, spouse has never had an overseas assignment
- ☐ Never at an overseas location at the same time
- ☐ Less than 1 year

NUMBER  
OF  
YEARS

0	0
1	1
2	2
3	3
4	4
	5
	6
	7
	8
	9

11. THINK ABOUT YOUR PCS MOVE TO YOUR PRESENT GEOGRAPHIC LOCATION, POST, OR BASE. How much of a problem was each of the following?

- ☐ Not applicable, have not made a PCS move.

	Serious Problem	Somewhat of a Problem	A Slight Problem	Not a Problem	Not Applicable	Don't Know
Adjusting to a higher cost of living	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temporary lodging expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costs of setting up new residence (e.g., curtains, carpeting, paint)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Costs of selling/moving from old residence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation costs incurred during the move	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding civilian employment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Continuing your education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Continuing dependent education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transferability of college credits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding permanent housing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding shopping areas, recreational facilities, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding dental care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding medical care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding child care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military treatment of dual-Service couples	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Children adjusting to new environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse adjusting to new environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjusting yourself to new environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establishing social contacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. How long ago did you make your last PCS move?

- ☐ Not applicable, have not made a PCS move
- ☐ Less than 3 months
- ☐ 3-6 months
- ☐ 7-12 months
- ☐ 1-2 years
- ☐ 3 years or more

### III OPERATION DESERT SHIELD/DESERT STORM

20. How much do you agree or disagree with the following statements? Answer even if your spouse was not deployed for Operation Desert Shield/Desert Storm.

- ☐ Does not apply. My spouse was not in the military during Operation Desert Shield/Desert Storm.  
☐ Does not apply. I was not married to my spouse during Operation Desert Shield/Desert Storm.

For each item below, mark if you:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Prior to Operation Desert Shield/Desert Storm, I was generally satisfied with my spouse's military duties and experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prior to Operation Desert Shield/Desert Storm, I expected my spouse to stay in the military until retirement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My present level of satisfaction or dissatisfaction is due largely to Operation Desert Shield/Desert Storm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was very upset with the mobilization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. Was your spouse deployed for Operation Desert Shield/Desert Storm?

- ☐ No (GO TO Q32, Section IV FAMILY PROGRAMS)  
☐ Yes, for less than 3 months  
☐ Yes, for 3 months or more but less than 6 months  
☐ Yes, for 6 months or more but less than 9 months  
☐ Yes, for 9 months or more

22. How much advance notice were you given regarding your spouse's deployment?

- ☐ 24 hours or less  
☐ 25-48 hours  
☐ 49-72 hours  
☐ 73-120 hours  
☐ More than 120 hours

23. When your spouse was deployed for Operation Desert Shield/Desert Storm did you move away from the location where you and your spouse lived together before deployment? Mark ALL that apply.

- ☐ Does not apply, my spouse and I were not living together prior to deployment  
☐ Yes, to live near a military installation  
☐ Yes, to live away from a military installation  
☐ Yes, to live near my family  
☐ No

24. Did your spouse's (or your) unit have a Family Support Group (or something similar to a Family Support Group)?

- ☐ Yes, an active one  
☐ Yes, but not very active  
☐ No  
☐ Not sure

25. During Operation Desert Shield/Desert Storm, how often did you talk to a military chaplain?

- ☐ Never  
☐ 2-3 times a week or more frequently  
☐ About once a week  
☐ 2-3 times a month  
☐ About once a month  
☐ Less than once a month

26. Did you talk more often, about the same, or less often to the chaplain prior to the start of Operation Desert Shield/Desert Storm?

- ☐ More often  
☐ About the same  
☐ Less often



30. Were there any additional financial burdens on you as a consequence of Operation Desert Shield/Desert Storm?

Mark ALL that apply.

- ☐ Yes, household & car repairs
- ☐ Yes, child care
- ☐ Yes, purchase of additional equipment
- ☐ Yes, other
- ☐ No, GO TO Q32

31. What was the amount of these costs from Q30?

\$ 

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

☐ More than \$1,000

#### IV FAMILY PROGRAMS AND SERVICES

The next questions are about specific family programs and services. The information will help evaluate present programs and plan future ones.

32. When you first arrived on your current base/post, what was your experience? (Please fill in the YES or NO circle next to each of the following.)

☐ Does not apply, I am not on base/post (GO TO Q35)

	Yes	No
I received a packet of material, brochures, maps, etc.	<input type="radio"/>	<input type="radio"/>
I attended an orientation meeting or an orientation tour was available to me	<input type="radio"/>	<input type="radio"/>
A spouse or member from the unit visited me at home	<input type="radio"/>	<input type="radio"/>
Someone from a military agency visited me at home	<input type="radio"/>	<input type="radio"/>
Spouses in the unit invited me to a party, coffee, or other social function	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>

33. Did you have a sponsor assigned to you when you first came on base/post?

- ☐ Yes
- ☐ No

34. How helpful was the sponsor that was assigned to you?

- ☐ Does not apply, I had no sponsor
- ☐ Very helpful
- ☐ Moderately helpful
- ☐ Very little help
- ☐ No help at all

35. How much did the people listed below help you in your adjustment to life as a military spouse at your current location? (Please fill in a circle next to each of the following.)

	Not At All	A Little	Some	A Lot	Does Not Apply
My spouse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse from the unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neighbor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sponsor assigned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NCO or officer in unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Someone from a military agency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



37. For each family program or service listed below, please mark (a) whether you have ever used it at your present location and (b) your level of satisfaction if you have used it.

	A) Used Service/Program		B) Satisfaction				
	Yes	No	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
Family Support Centers/Family Service Center/Army Community Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual counseling/therapy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marriage and family counseling/therapy/enrichment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Services to individuals or families concerning military separation/deployment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chaplain services/religious opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parent education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Youth/adolescent programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Child care services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Single-parent programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre-marital programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Services for families with special needs (e.g. handicapped, gifted)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crisis referral services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse employment services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spouse/child abuse services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alcohol treatment/drug abuse programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rape counseling services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal assistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relocation assistance services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information and referral services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stress management programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suicide prevention programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transition assistance/pre-retirement/separation from military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing Office services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



45. If you have a child or children and are using/have used the base/post child care center within the past 12 months, please indicate your level of satisfaction or dissatisfaction for each item.

☐ Not using base/post child care centers (GO TO Q46)

For each item, mark if you are:	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
Overall quality of care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Size of center to handle number of children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of physical facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety of center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of educational program(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hours of operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff to child ratio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Child development/age appropriate activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## V YOUR BACKGROUND

This set of questions will be used to describe military families.

46. Are you:

- ☐ Male  
☐ Female

47. How old were you on your last birthday?

AGE  
LAST  
BIRTHDAY

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

48. Where were you born?

- ☐ In the United States  
☐ Outside the United States to military parents  
☐ Outside the United States to nonmilitary parents

49. Are you an American citizen?

- ☐ Yes  
☐ No, I am a resident alien  
☐ No, I am not a resident alien

50. Are you:

- ☐ American Indian/Alaskan Native  
☐ Black/Negro/African American  
☐ Oriental/Asian/Chinese/Japanese/Korean/Filipino/Pacific Islander  
☐ White/Caucasian  
☐ Other (specify):

51. Are you of Spanish/Hispanic origin or descent?

- ☐ No (not Spanish/Hispanic)  
☐ Yes, Mexican/Mexican-American/Chicano  
☐ Yes, Puerto Rican  
☐ Yes, Cuban  
☐ Yes, Central or South American  
☐ Yes, other Spanish/Hispanic

52. AS OF TODAY, what is the highest school grade or academic degree that you have? DO NOT INCLUDE DEGREES FROM TECHNICAL/TRADE OR VOCATIONAL SCHOOLS. Mark One.

- ☐ Less than 12 years of school (no diploma)  
☐ GED or other high school equivalency certificate  
☐ High school diploma  
☐ Some college, but did not graduate  
☐ 2-year college degree  
☐ 4-year college degree (BA/BS)  
☐ Some graduate school  
☐ Master's degree (MA/MS)  
☐ Doctoral degree (PhD/MD/LLB)  
☐ Other degree not listed above

53. Are you currently: Mark One.

- ☐ Married for the first time  
☐ Remarried, was divorced  
☐ Remarried, was widowed  
☐ Separated  
☐ Widowed  
☐ Divorced



## VII YOUR WORK EXPERIENCE

Information about your work experience and family resources will help plan future programs.

65. Are you currently: Mark ALL that apply.

- ☐ Full-time in the Armed Forces
- ☐ In Reserve or National Guard
- ☐ Working full-time in Federal civilian job
- ☐ Working full-time in other civilian job
- ☐ Working part-time in Federal civilian job
- ☐ Working part-time in other civilian job
- ☐ Self-employed in own business
- ☐ With a job, but not at work because of temporary illness, vacation, strike, etc.
- ☐ Unpaid worker (volunteer or in family business)
- ☐ Unemployed, laid off, or looking for work
- ☐ Not looking for work but would like to work
- ☐ In school
- ☐ Retired
- ☐ A homemaker
- ☐ Other

66. How long have you been working for your present employer or been self-employed?

☐ Does not apply, I am not employed. (GO TO Q71)

NUMBER  
OF  
MONTHS

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

67. To what extent does your current paid job(s) interfere with your spouse's military job?

- ☐ Completely
- ☐ A great deal
- ☐ Somewhat
- ☐ Very little
- ☐ Not at all

68. To what extent does your spouse's military job interfere with your current paid job(s)?

- ☐ Completely
- ☐ A great deal
- ☐ Somewhat
- ☐ Very little
- ☐ Not at all

69. How has Operation Desert Shield/Desert Storm affected your paid work? Mark ALL that apply.

- ☐ No effect on my work life
- ☐ Lost/quit my job
- ☐ Reduced working hours
- ☐ Increased working hours
- ☐ Led to my taking a job
- ☐ Other (specify):

70. How much did each of the following contribute to your decision to work? Mark One for each item.

For each item below, mark if it was:

Need the money for basic family expenses

Always planned to work/have a career

Wanted extra money to use now

Saving income for the future

Independence/self-esteem

Just enjoy working

To gain experience for a future career

Other (specify):

	Major Contribution	Moderate Contribution	Minor Contribution	No Contribution
Need the money for basic family expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Always planned to work/have a career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wanted extra money to use now	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saving income for the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Independence/self-esteem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Just enjoy working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To gain experience for a future career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (specify):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

77. Why didn't you perform volunteer work? Mark ALL that apply.

- ☐ No interest
- ☐ Too busy
- ☐ Problems with child care availability
- ☐ Problems with child care cost
- ☐ Problems with transportation
- ☐ Was deployed or TDY
- ☐ Other (specify):

78. What would increase your interest/ability to volunteer?

Mark ALL that apply.

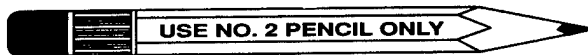
- ☐ Parking privileges
- ☐ Volunteering with a friend
- ☐ More volunteer assignments of interest
- ☐ Reimbursement of expenses
- ☐ Child care
- ☐ More recognition for volunteer assignments
- ☐ Opportunity for useful training for the future
- ☐ Better leadership of volunteers
- ☐ Better organization of volunteers
- ☐ Other (specify):

☐ Nothing would increase interest/ability

## VI MILITARY WAY OF LIFE

79. All things considered, please indicate your level of satisfaction or dissatisfaction as a spouse with each feature of military life listed below.

For each item, mark if you are:	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	No Opinion/ Experience
Military housing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military pay and allowances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military job security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military retirement benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military promotion opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rights of civilian spouses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Levels of demands made on civilian spouses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family separations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PCS moves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dental care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medical care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environment for families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities for education/training for civilian spouses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service attitude toward families and family problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time available for military member to spend with family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of job opportunities/employment for civilian spouses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership practices at my spouse's command	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adequate resources and support for my spouse to do his/her job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to be a homeowner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall economic stability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marital satisfaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relationship between my spouse and his/her children/other dependents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## COMMENT SHEET

Please provide us with any comments you may have regarding military policies or military life in general in the space below. Before commenting, please fill in one bubble in each section.

**Your Spouse's Rank:**

☐ Officer    ☐ Enlisted

**Your Spouse's Location:**

☐ CONUS    ☐ Overseas

**Your Spouse's Service:**

☐ Army    ☐ Air Force

☐ Navy    ☐ Marines

**Your Rank (if applicable):**

☐ Officer    ☐ Enlisted

**Your Location:**

☐ CONUS    ☐ Overseas

**Your Service (if applicable):**

☐ Army    ☐ Air Force

☐ Navy    ☐ Marines

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**Thank you for completing this survey!**  
**Please mail the survey in the envelope provided.**